May, 1959

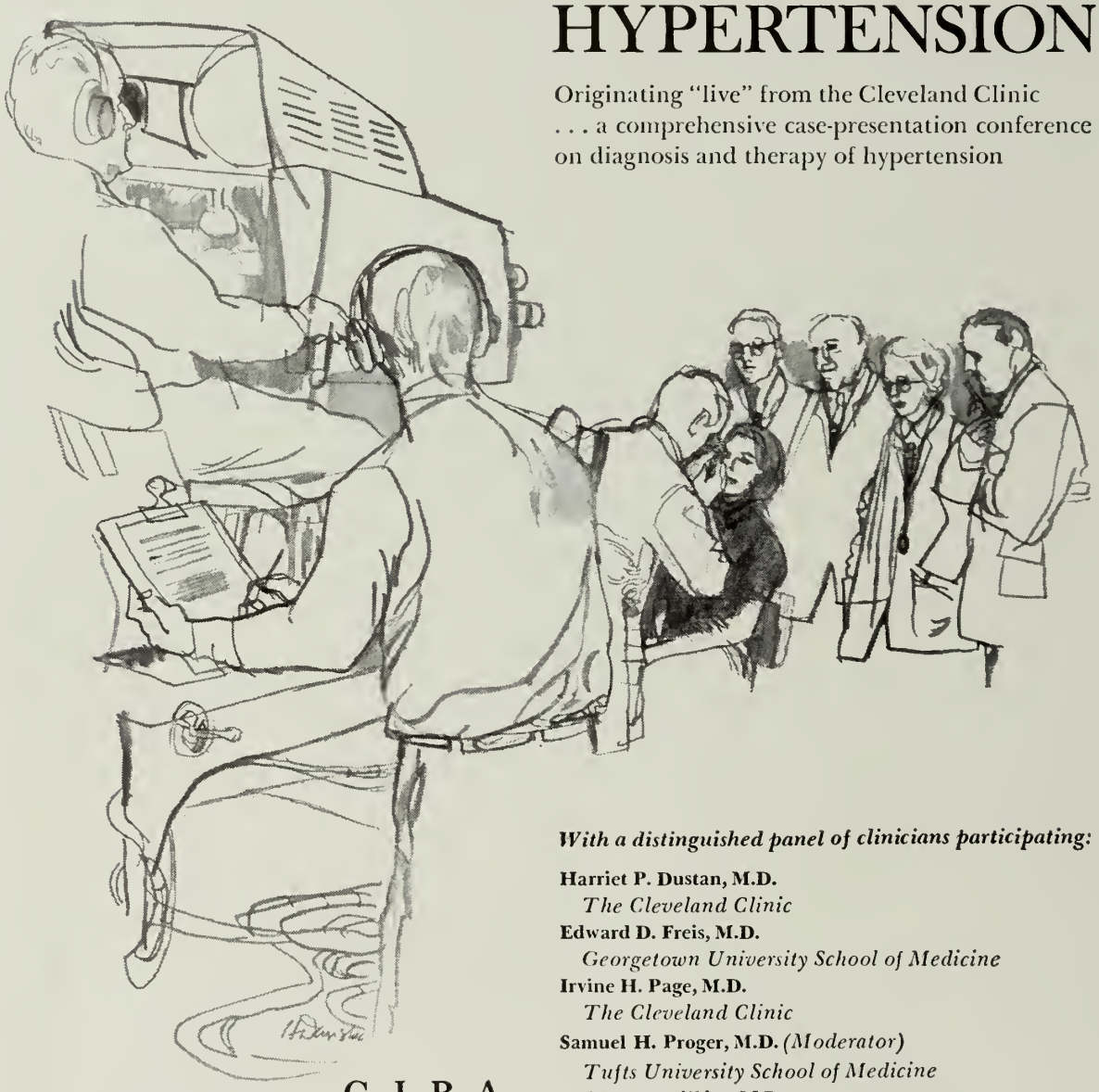
HARVARD MEDICAL
ALUMNI BULLETIN

Empathy

You are cordially invited to attend a notable closed-circuit television event
Wednesday evening
May 27, 1959

CIBA TV
CLINICAL SYMPOSIA
HYPERTENSION

Originating "live" from the Cleveland Clinic . . . a comprehensive case-presentation conference on diagnosis and therapy of hypertension



CIBA
SUMMIT, N.J.

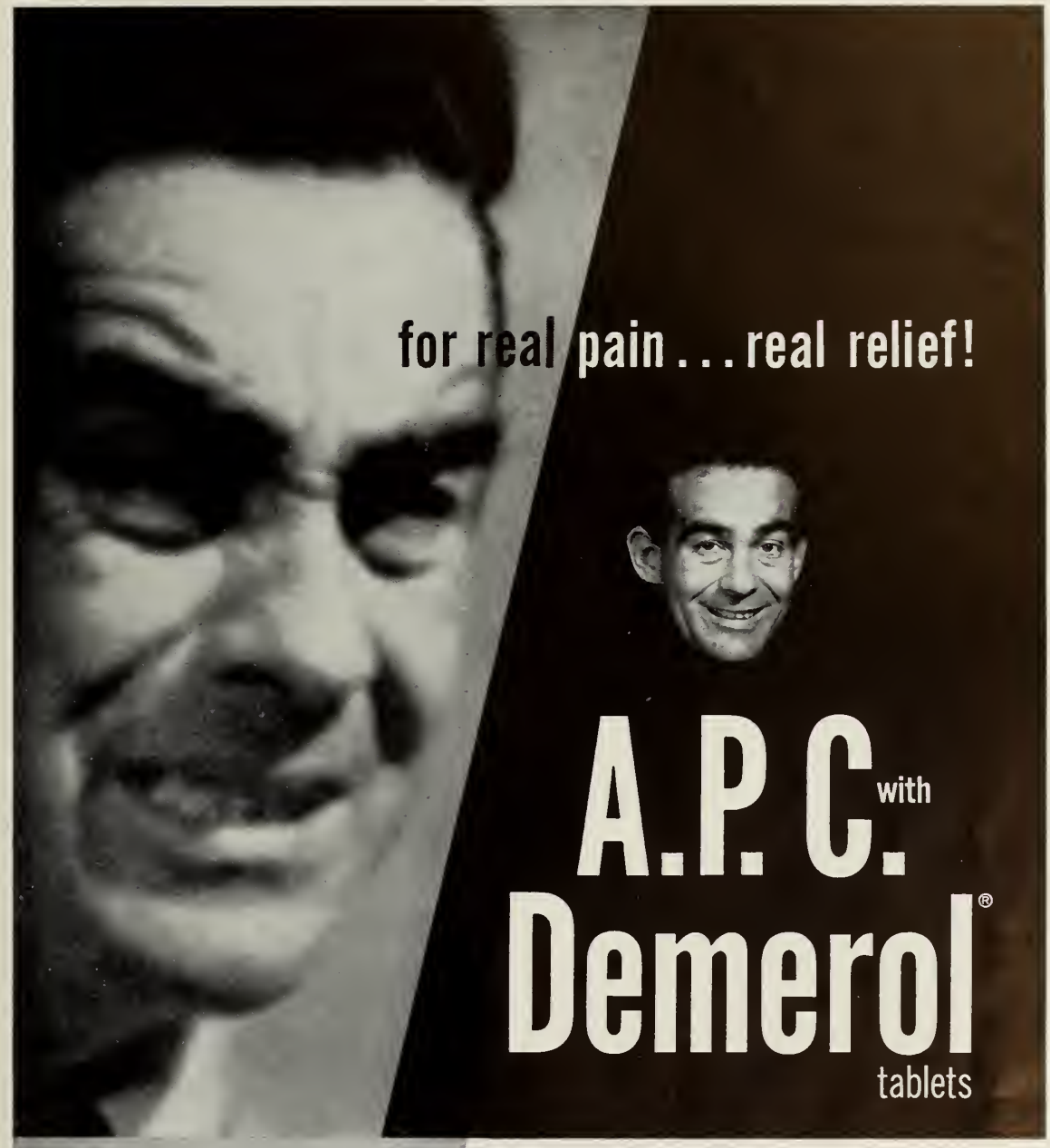
With a distinguished panel of clinicians participating:

Harriet P. Dustan, M.D.
The Cleveland Clinic
Edward D. Freis, M.D.
Georgetown University School of Medicine
Irvine H. Page, M.D.
The Cleveland Clinic
Samuel H. Proger, M.D. *(Moderator)*
Tufts University School of Medicine
Robert W. Wilkins, M.D.
The Boston University School of Medicine

When and where you can see this one-hour program – watch your mail for exact locations

Local Time	*City*
9 P.M.	Albany, N. Y.
8 P.M.	Atlanta, Ga.
9 P.M.	Baltimore, Md.
9 P.M.	Boston, Mass.
9 P.M.	Brooklyn, N. Y.
8 P.M.	Chicago, Ill.
9 P.M.	Cleveland, Ohio
6 P.M.	Denver, Colo.
8 P.M.	Detroit, Mich.
9 P.M.	Garden City, N. Y.
7 P.M.	Kansas City, Mo.
6 P.M.	Los Angeles, Calif.
7 P.M.	Memphis, Tenn.
8 P.M.	Miami, Fla.
9 P.M.	Newark, N. J.
9 P.M.	New York, N. Y.
9 P.M.	Philadelphia, Pa.
9 P.M.	Pittsburgh, Pa.
5 P.M.	Portland, Ore.
6 P.M.	Salt Lake City, Utah
6 P.M.	San Francisco, Calif.
5 P.M.	Seattle, Wash.
8 P.M.	St. Louis, Mo.
9 P.M.	Syracuse, N. Y.
9 P.M.	Washington, D. C.

2/2689MB



appreciably more effective than A.P.C. with codeine

or Codeine Substitutes

each tablet contains:

Aspirin	200 mg.	(3 grains)
Phenacetin	150 mg.	(2½ grains)
Caffeine	30 mg.	(½ grain)
Demerol hydrochloride	30 mg.	(½ grain)

adult dose: 1 or 2 tablets repeated in three or four hours as needed.

supplied: Bottles of 100 and 1000 tablets, scored.

Narcotic Blank Required.

Winthrop LABORATORIES
New York 18, N.Y.

Demerol (brand of meperidine), trademark reg. U. S. Pat. Off.

LETTERS

Postscript on a Postscript

To the Editor of the *Bulletin*

Joe Garland's delightful article, "Safe Deliverance," in the February *Bulletin* puts me in mind of one of Fritz Irving's famous stories. Of course, we cannot vouch for the *complete* truth of the facts but it is typical of the "Irving stock" of apt stories.

A rather large, 300-pound colored lady had been delivered of a bouncing 12 (and some ounces) boy and all went well.

Fritz was making the rounds and came to Mrs. (?) Jones, who was due to go home that day. The usual chat took place and Mrs. Jones said:

"Oh, Dr. Irving, the hospital has been *so* good to me that I never want to forget it. I read my chart and found the name for my boy, so I'll always remember you-all. I'm going to name him just as it is on that chart. He will be WASSERMANN POSITIVE Jones!"

A. William Reggio, '12

Vocational Guidance Dept.

Dear Sir:

I would like you to send me some books on Chiropractury because my class is doing a vocation on what we want to be. I want to be a Chiropractor. I hope you will send the pamplet as soon as possible.

Hoping you will oblige,

Yours very truly,
John Schiavo
266 West 16th St.
Deer Park, New York

NORTH CAROLINA REGIONAL MEETING

On Wednesday, March 11, 1959, a "social hour" and dinner were held at the Carolina Inn for the H.M.S. Alumni of the State. The meeting was arranged to coincide with Dr. Lanman's participation in the Examinations of the American Board of Surgery at Durham.

There are approximately 140 Alumni in the State, and more than a third of these attended the dinner with their wives, bringing the total to 92. Bill Pitts, '33, Vice President of the Harvard Medical Alumni Association of Charlotte, was Toastmaster. Dr. Edwin A. Locke, '01, former Clinical Professor of Medicine at H.M.S., and Mrs. Locke were visitors at the Inn and were guests of Dean and Mrs. Berryhill. In all, 29 classes were represented — from 1901 to 1958.

After dinner, a few speeches were given, followed by a movie of the Medical School entitled "Materia Medica." Still later in the evening, a small, self-appointed committee, composed of Brenizer, Brabson, Pitts and Fitts of Charlotte, and Murphy and Lanman of Boston, took power into their own hands and, disregarding parliamentary procedure, voted unanimously to make the North Carolina Meeting an annual event.

CLASS DAY

Saturday, May 30, 1959

Longwood Quadrangle

10:30 a.m. - 12:00 noon — Exercises for the Class of 1959

Awarding of Alumni Prize — Charles C. Lund, '20, President, Harvard Medical Alumni Association

12:00 noon — Class Day Luncheon

(All Alumni are guests of the School)

HARVARD WOMEN

1949 - 1959

This year marks the Tenth Reunion of the awarding of the Degree of M.D. to women at Harvard.

There will be a Reception and Tea by the Women of 1959 on Friday, May 29, from four to five-thirty o'clock in the Deanery at Vanderbilt Hall.

Harvard Medical Women Graduates and their husbands are cordially invited to attend.

Guest of Honor

Dr. Helen Brooke Taussig

RETIREMENT

William Tobey

Dr. Burwell

As many know, an outstanding former dean of the Faculty of Medicine will retire this summer. They may not know that Dr. C. Sidney Burwell, '19, combines an unusual number of distinguished other selves. He is also an eminent physiologist in the cardiovascular field, a very productive scholar, and an inspiring teacher.

As Dean of the Faculty of Medicine from 1935 to 1949, Dr. Burwell guided the Medical School through the hectic days of World War II, when Harvard's medical program was stepped up by wartime demands and its Faculty depleted by military service.

During this period, Dr. Burwell laid plans for the future growth and development of the School after the war should be ended. This planning encompassed four major areas: One problem concerned the replacement of a group of distinguished members of the Faculty of Medicine who were reaching the statutory age for retirement. Related was the problem of the sudden turnover of most of the Faculty, once every five years, as a result of the appointment system. In his last year as Dean, Dr. Burwell worked out a plan for staggering these Faculty appointments, which eliminated the need for these massive periodic reorganizations.

A second challenge was the integration of the Medical School with the eight academically associated hospitals. With a "Committee of Eight" leading members of the Faculty of Medicine, he set up a series of organizational plans, and laid the groundwork for the present closer affiliation of the teaching hospitals with the Medical School, especially as regards departmental appointments.

Dr. Burwell's third concern was the reorganization of the School of Dental Medicine. The basic decision involved a change in orientation for the Dental School from one which was primarily clinical to one based on the basic medical sciences with emphasis on research and preventive dentistry.

The growing importance of the basic medical sciences and the need to strengthen their instruction and research was the fourth problem to occupy Dr. Burwell's attention during and following the war years. He initiated, too, a series of postwar fellow-

ships, financed from endowments accumulated during the war, to stimulate young physicians just emerging from national service to prepare for careers in teaching and research. With Dr. Eppinger, Assistant Dean in Charge of Courses for Graduates, Dr. Burwell also organized a six-month refresher course for the service physicians to bring these up to date on the medical advances made during the war period.

As Associate Professor of Medicine and Head of the Department at Vanderbilt Medical School from 1925 to 1935, Dr. Burwell first began to study pregnancy as a factor which influences the onset of heart failure in pregnant patients with heart disease. His studies have brought to medicine a clearer understanding of the physiological and cardiovascular factors influencing the course of heart disease in patients, particularly the peculiar maternal circulatory adjustments which take place in women during pregnancy. His studies have brought assurance to women with heart disease that the vast majority can be successfully carried through pregnancy. In 1958, he published, with Dr. James Metcalfe, a definitive work, *Heart Disease and Pregnancy,* describing the specific problems presented by heart disease in pregnant women and outlining for the physician the most modern methods of management.

Dr. Burwell's research bridges the gap between basic physiology and the clinical problems of the respiratory and cardiovascular systems. Beginning as Resident Physician and Instructor at Johns Hopkins in 1921, Dr. Burwell began his long series of studies on cardiac output under Dr. G. Canby Robinson. His chief interest was in the measurement of cardiac output in various diseases and in the natural, self-limiting mechanisms controlling disease. As early as 1940, with Dr. Eugene Eppinger of Harvard, Dr. Burwell described methods for measuring the volume of blood passing through the patent ductus of the heart. These measurements antedated those made later by cardiac catheterization.

Many honors have been paid to Dr. Burwell, not all of them strictly professional: In 1951 the Aesculapiad was dedicated to him as "the rare professor who can do all three: think, talk and work." He has been awarded honorary degrees from Syracuse University and Allegheny College and has been president of both the American Society for Clinical Investigation and American Clinical and Climatological Assn.

The most recently published history of the Medical School, Harrington's, was written in 1906. As Consultant to the Dean, Dr. Burwell plans to write a new history of the School following his retirement.

HARVARD MEDICAL ALUMNI BULLETIN

VOL. 33 MAY 1959 NO. 3

The Cover: On March 16, two daughters of '59, Carrie Alice Green and Mary Lyn Brown, registered the concern their fathers may have felt, as internships were announced on Monday morning. Howie Green came dressed in green with high hopes to go to Hanover. No need for concern, he'll be at the Mary Hitchcock. Forst Brown is going to University Hospitals in Cleveland. Photo by David Lawlor.

DIAGNOSIS DEFERRED

It Pays To Advertise

The matter of drugs and how they are advertised and sold is creating considerable interest in what is happily called the medical fraternity, in these salad days of pharmacologic research and of fast moving and mitotic money. According to reliable sources some 125 manufacturers have been launching an average of nearly 400 new products or new combinations of products each year since the close of the Korean War; by its own admission the industry invested $170,000,000 in 1958 in the discovery and testing of new products, and expects to increase the total this year, if only by a niggardly $20,000,000. Apparently the business has been sneaking up on us since the age of innocence when a shot of sulfur and molasses gave the blood its annual spring cleaning.

It is said to be all a matter of competition, traditionally identified as the life of trade, and an exceptionally spirited competition has given rise to new practices in publicity unknown to the bearded druggist of the previous century, who did his own compounding of prescriptions in the back room and, lacking a soda fountain, sold hard liquor under the counter between times, or vice versa.

Even as the medical profession has turned to the pharmaceutical industry for largesse, however, it looks on it askance, views many of its products with disdain, and acts, in short, as if it were "in trade." Its attitude is that of a silent watcher of the night before Christmas, waiting by the fireside with club in hand for Santa Claus to come down the chimney. It reminds one of a foreign recipient of American aid, screaming coarse insults at Uncle Sam between handouts and hurling rocks through his embassy windows.

It is true that not all of the drug manufacturers are strictly on the up and up and that they market undesirable products and especially undesirable combinations of products, sometimes in incandescently objectionable terms. An interesting study of the reaction of students to drug advertising was staged at Albany Medical College and reported last year by Solomon Garb,[1] associate professor of pharmacology at that institution. Each of a class of second-year students followed through the various means of advertising a presumably new drug, and appraised its usefulness on this basis. Not more than 10 per cent of the offerings were found to be less than a year old and more than half had been listed in the *Physicians' Desk Reference* for two years or more. Detail men were interviewed and were found to be generally eager and honest, but not especially well informed on the products in favor of which they were trying to convince the doctors.

An editorial accompanying Dr. Garb's article suggested the need for a satisfactory loose-leaf prescription formulary of the really useful agents. Such a formulary, it was stated, might be so constructed as to include 95 per cent of the drugs used in practice.

Another study in which students were employed as interviewers was conducted by a number of drug publications. The purpose of this canvass was to get the reactions of retail drugstore owners to the pharmaceutical advertising that is directed toward them in their own trade journals. A distressingly high proportion of these independent merchandisers expressed themselves as interested only in the accelerated buck, regardless of the quality of their wares.

Another deplorable development in the promotional methods of some small part of the drug industry and its agents is the directing of patronage toward the medical school and its students. The unrestricted underwriting of basic or even of applied research is not referred to in this relation but rather the offering of prize gifts, cash prizes, vacation trips and similar confectionery. Such patronage has seemed especially objectionable when offered through the agency of the Student American Medical Association, whose leaders should be setting an example of modesty, dignity and general purity of heart.

There is more to the pharmaceutical problem, however, than condemning the whole business as a mercenary but necessary evil. As one gives it thought one becomes convinced that President de Gaulle had a point when he said that we learn to live with our problems instead of solving them. So long as fevered scientists by the thousands in elegantly equipped laboratories by the hundreds are turning out new products by the dozens, to be written in a book of gold, pharmaceutical manufacturers by the scores will be in a dither to get their own products off the assembly line and into circulation ahead of their competitors.

We are living in an age of tolerably effective therapeutics. No longer need Aunt Hepzibah turn to the arnica bottle (if arnica comes in a bottle) for a muscle relaxant, nor can the historic retreat of pneumonia, the old man's friend (has he one now?), be attributed to the universal application of onion poultices to the affected side.

Revolutionary ideas have been suggested by Dr. Garb's students: that direct-mail advertising matter go direct from the doctor's secretary's desk to the circular file, that detail men be better instructed in order that they may themselves instruct better, especially in the unfortunate side effects that are not infrequently associated with drugs both old and new, and that medical journals adopt a more discriminating attitude in the selection of advertising material.

For it must be remembered that the average practicing physician, despite his medical-school course in pharmacology, may need more help than he is currently receiving when it comes to selecting those of the year's 400 new products that will best suit his purposes. More impartial information regarding the present kaleidoscopic pharmaceutical phantasmagoria is necessary, and the new trend toward supplying him with such information, from independent sources, comes none too soon.

1. Garb, S. Reactions of students to drug advertising. *New Eng. J. Med.* 259:121-123, 1958.

Along the Perimeter

Within Eyeshot

Rising behind the Lying-in Hospital on Longwood Avenue is a new 3-story research building, scheduled for completion by January, 1960. The Lying-in plans a new one-story cafeteria extension, also, combined with refrigeration area, to open by August 1 of this year. We're wondering whether the famous labyrinthian approaches to the cafeteria will succumb to modernization.

Renovation work on Building B-2 in the Quadrangle will be pretty well wrapped up by June 1, and ready for the Departments of Anatomy and Pharmacology. The *Bulletin* reported last May the conversion of the original 4 stories into 5.

There were long winter months when no one could use the tunnel to get from Building A to D, and with Building B-1 next on the renovating agenda, it may be a long time yet. But spring is here, so tunnel be damned!

Im Westen, 'Was Neues

Forty-eight acres in Boston's West End, an area which Alumni will remember as directly adjacent to Massachusetts General Hospital, are now being razed as part of the City's urban renewal program. Two thirds of clearing costs are being assumed by a Federal Grant, one third by the City, and the land is then to be sold to Charles River Park, Inc., a private developer, to construct 2,400 modern apartments

Razing in progress in Boston's West End, as seen from the twelfth floor of the Baker Building at M.G.H. One remaining occupant has not yet been evicted from the lone building standing in the right middle foreground. The Peabody

in a park-like setting along the Charles.

The acute need for modern, medium-priced apartments, close to the downtown area, has been cited, as have the tax benefits accruing to the City. (The taxable assessed value of the area was approximately $6,000,000. The redevelopment will provide $25 to $30 million of new construction, and there will be no tax concession on this construction.)

As most Alumni are aware, the area was a low-rent and colorfully shabby district. The physical decline of the area within the last years has been attributed largely to the high percentage of absentee ownership. At present sixty-five per cent of the residents have been relocated at City expense, and the famed old Elizabeth Peabody House is now a tall shell, waiting for the wrecker.

What will uprooting of these people from their homes do to some 2,600 families who must get out of the West End to make way for apartment houses? A joint Harvard-Massachusetts General Hospital study with a $400,000 Federal Grant is making a five-year study to determine this. It was pointed out that the West End had been a community of minimal ethnic strife, of people largely of Italian, Polish, and Jewish background with close family connections. One in every five of these families will take part in the study. Will the scattering of these groups result in more delinquency and troubled children? How do people who have to deal with the problems of relocation master them? The study will try to answer these questions.

By the end of 1959, the remaining 35% will be moved. New construction should begin within the next six months, simultaneously with the end of demolition.

Many people will miss the colorful streets on market days, the Italian pastry shops and the accordion players on summer evenings. In their place, the architect promises several basic building groupings, each of different design, to avoid the repetitious effect given by many modern apartment-house groupings. Doctors from M.G.H., who now spend much time commuting, may find the river apartments attractive and convenient, much as M.I.T. professors appreciate living at 100 Memorial Drive.

Harvard's Marble

Historical anecdotes often bloom into fascinating flowers but may be difficult to trace to the ramifications of their roots. This we find to hold true in tracing the origin of the mighty marble used in the walls of the Harvard Medical School.

Originally designed in brick, rumor has it that the marble in the present buildings was first bought for the Public Library in New York. This institution rejected the marble because of the iron and sandstone streaks which mar its perfection. The Norcross Brothers, who were contractors both for the Public Library and H.M.S., arranged for Harvard Medical to purchase the marble at a considerable reduction. The left-over marble is said to have gone into the construction of the library at Brown University. The marble had been quarried in Europe, possibly in Italy. This was the favorite after-dinner story.

Interesting variations on the story of the original purpose of the marble hold that it was intended for the

House awaits wrecking cranes in left center. At extreme left background, construction has begun next to Hayden Planetarium on a new Central Building for the Boston Museum of Science. David Lawlor

Museum of Modern Art in New York, or (more likely—ed.) for a church in Quincy. Reputed reasons for rejection of the marble for this mysterious other building also vary: some say there was too much marble, some too little, that the marble was too expensive, and had too many imperfections. The rumored costs of the marble range from half price, an even trade of brick for marble, to a savings of $70,000 for marble over brick.

It seems safely established that the marble came from a quarry in Dorset, Vermont owned by the Norcross Brothers (now out of business), and credit is justly given to Dr. John Warren and Dr. Henry Pickering Bowditch who, with noses atwitch in the prevailing breezes, got wind of the marble and negotiated the transaction.

Somewhere in the obscurity of history, or that of some file in this great University, lie the bits of information necessary to complete this story. Until then we let rumors run rampant.

Boston Herald, March 3, 1959:

(AP) Minneapolis — A six-months-old baby, choking on a large wooden bead Monday, apparently was saved by a tiny hole in the bead that let enough air through to keep her alive. Mrs. Charles Ungemach found her daughter, Julie, violently gasping for breath in her crib Monday morning.

A fire department rescue squad worked over the child with a resuscitator for 25 minutes. The baby lost consciousness several times before firemen got her to a hospital, where the head was removed by surgery and the baby pronounced out of danger.

The wonders of modern surgery! — Ed.

PROFILE

ALEXANDER FORBES, '10

Adrian, Sherrington, and Forbes

Alex

From my childhood, I remember him well. My family and his often joined for Washington's Birthday skiing in New Hampshire. His premature grayness seemed to be incongruous with his energy, enthusiasm and apparent lingering youthfulness, but I thought of him then as elderly and we gasped as he plunged with abandon down the snow-covered trails. I saw him again skiing last winter in Franconia, now white-capped but still vital, energetic, plunging (more sedately) down those same snow-covered trails.

Alexander Forbes, '10, now Professor of Physiology, *Emeritus,* is a New England Forbes whose life has been notable for its unending lack of orthodoxy. It is true that he graduated from Harvard College in 1904, like any other Forbes. But this was rational orthodoxy. As a boy he was fascinated by electricity and then after college, realized with further enthusiasm, that there was a close relationship between electricity and animal nerve impulses. His major interest for the rest of his life was to remain in the field of electro-neurophysiology.

Shortly before entering college, Dr. Forbes noted the onset of deafness which has been with him to this day. In 1910, he graduated from the Medical School and immediately became an instructor in the Department of Physiology. He never entered clinical medicine. He joined the Department at the time of the ascendancy of Walter B. Cannon. It was the beginning of the Medical School's most glorious era in physiology. Cannon, Rosenbleuth, Davis, and Forbes worked together for a number of years in this extremely productive department.

In 1911, Dr. Forbes studied in England with two men who were profoundly to affect his thinking and the direction of his work. Sherrington was Professor of Physiology at Liverpool. From his work stems much of our present-day knowledge of neurophysi-

ology. Here, Dr. Forbes worked with Sherrington on various aspects of spinal reflexes and cemented his interest in neurophysiology. He laughs when he recalls Sherrington's admonition: "Forbes, when you write a paper remember your reader is the stupidest man in the world!" In the same year, Forbes spent a short time with Keith Lucas at Cambridge when Lucas was first developing electrical recording techniques and laying the foundation for the "all-or-none" law of nerve impulse. Later he was to visit England and study with Adrian, Lucas' disciple, at a time when the former had become one of the most eminent neurophysiologists in the world.

ALEX FORBES was never content to confine his pursuits to one field. Although his work in the Department of Physiology involved a good deal of his time, both World Wars took him from the Medical School. During World War I, he volunteered for the Navy and was made skipper of a patrol vessel in the Newport Harbor area, escorting vessels through the net barricades. Following this, he spent a considerable period of time in research on radio equipment; to such an extent that he was named Radio Officer on board the scout cruiser *Salem* in the middle of the War. Towards the close of the War, on the advice of his classmate, Franklin Roosevelt (he never voted for him), he went to work for the Bureau of Engineering in Washington with the express purpose of studying radio direction-finding equipment. Then he was assigned to a destroyer that had newly acquired radio direction-finding equipment and sailed to Europe and England installing and testing this aid to navigation. It was at approximately this time that more radio direction-finding stations were being established along the Eastern Seaboard and in the winter of 1918-19, as the American troops were returning to America, considerable priority was placed on this work in order to assure a safer passage home for American soldiers. Dr. Forbes recalls now his efforts to speed up this work by requesting overtime labor and how it fell on deaf ears even after one of the troop ships returning to New York was caught in thick fog, ran aground on Fire Island and was forced to unload its troops by breeches buoy. Dr. Forbes speculated at the time on the likelihood of a similar landing being forced upon Woodrow Wilson should his ship run aground on his return from Versailles.

In 1919, Dr. Forbes was detached back to the Medical School and as Associate Professor in 1921, he plunged back into work in the laboratory on the physiology of nerve impulse, spending much of his time working with Hallowell Davis. It was during this time that he contributed in many ways to the laying of the foundation for further physiological data pertaining to the nervous system; it was during these years that he crystallized his important concept of delay paths in the nervous system; it was during this time that he studied the effects of anesthesia on nerve impulse; and it was during these years that his very basic contributions to the physiology of spinal reflexes were brought forth.

In 1929, Dr. Forbes began flying. He still flies. Dr. Stanley Cobb, '14, recalls one of a number of anecdotes that relate to his airborne activities. While flying to Atlantic City one day to present a paper, he leaned out of the window of his plane and lost his bifocal glasses to the passing breezes. Having no major difficulty with distant vision, he landed safely. The following day, Dr. Cobb found him in a local optical store trying on ready-made spectacles. Dr. Forbes told him of his plight, all the while testing his vision with the cheap lenses. Finally, blinking a bit behind glasses he'd finally chosen, he stated that he'd found a pair that would carry him through the meeting and presentation of his paper.

In 1934, following a year of preparation and with the guidance of Grenfell, he undertook the intriguing job of mapping Northern Labrador. Here on his boat, the *Ramah,* he spent the summer months with friends investigating several of the heretofore untouched natural fjords of Labrador. He also took two planes to help in mapping this area. Prior maps were completely erroneous, and at the present time the northern part of Labrador owes its accurate mapping to this work Dr. Forbes carried out in collaboration with O. M. Miller.

WHEN World War II began, he was a Lieutenant Commander in the Medical Corps, first working at Pensacola studying the selection of pilots and the investigation of their EEG tracings. Later during the war he was called by the Hydrographic Office in Washington to work on photogrammetry. His aerial photographic map-making experience made him a natural choice to help in establishing Air Bases in the Labrador-Greenland area for the shuttle service for fighter planes unable to take the big hop from Gander to Ireland. This work, involving him in considerable flying in the area, was reported in his excellent monograph entitled "Quest for a Northern Air Route."

As a natural outcome of this work in air photography, he was picked in 1946 to work, on behalf of the Bureau of Ships in Washington, on photographic study of the Bikini operation. His work here consisted of photographic measurement of the waves set up by the underwater bomb. He reports an amusing incident that occurred as he was taking leave of the Hydrographic Office on his way to Bikini. His friend, the Assistant Hydrographer, was departing with a carload of Wave officers headed into Washington and called to Dr. Forbes inquiring as to what he was going to do at Bikini. His innocent and completely truthful answer to the Hydrographer was greeted with a chorus of laughter, "I'm going to be measuring waves."

With the end of the war, came the end of his active Professorship in Physiology at Harvard. He retired in 1948 and moved to the Department of Biology in Cambridge where he is now, working on problems of color vision and the physiology of the retina.

In spite of an exceptional number of time-consuming hobbies at which he has always excelled, Dr. Forbes has gained an international reputation in his chosen field of neurophysiology. His original scientific output has been immense and much of our present knowledge of the spinal cord stems from work to which he contributed in the laboratories of Physiology at Harvard.

For me, Dr. Forbes' fascination has always been his ability to remain young. Above all, stand out his friendly enthusiasm for the young and his soft humor in his dealings with people. His enthusiasm for flying, for skiing, for riding, and above all for sailing, remain unchanged and have gained him and his family countless warm friends. When I left him the other morning at his house, he said that he was not going to work that day because an instrument he had ordered had not arrived and he could not carry on his special study without it. As I headed out the driveway, I could see him loading his short double-ended skis into the back of his car. He was headed for a day in the country.

J.R.B.

DOCTOR AND THE LAW

Charles J. Dunn, LL.B., and John F. Dunn, LL.B.

OUR aim in this article is to set forth in as untechnical language as possible the doctor's legal obligation to his patient and offer a suggestion or two as to how he can best avoid involvement in a malpractice suit.

The law, as laid down in theory, is simple and substantially the same in most jurisdictions. The doctor's legal contract implies his possession and exercise of the same degree of care and skill as other doctors practicing in the same or similar communities. He does not warrant a cure; he is not responsible for want of success unless it results from lack of ordinary care and attention; he is not responsible for errors of judgment or mere mistakes in matters of reasonable doubt, provided he exercises ordinary skill and diligence. If the doctor fails to fulfill this obligation, however, he is answerable in money damages. (How different under the code of Hammurabi, wherein, if a doctor operated on a man and caused his death, the doctor's fingers were amputated! Due care on the part of the doctor was not an issue: only results counted. Such were the hazards which beset the ancient surgeon!)

It is the application of the present rule of law which poses some problems in malpractice cases. There is no uniformity in the way it is applied: some jurisdictions apply it liberally; others strictly, but even in the latter jurisdictions, both the courts and the legislatures are now relaxing the rigidity of the rule and making it a little easier for plaintiffs in malpractice cases to get their case to the jury. In recent years some state legislatures, recognizing the difficulty of proving negligence on the part of a doctor, passed legislation permitting the use of medical textbooks as an aid in establishing the plaintiff's claim. Prior to these enactments, about the only way a plaintiff could get his case to a jury was to have another doctor testify that in his opinion the defendant had been careless.

In some cases the patient would testify that his doctor had admitted making a mistake (thus dispensing with the necessity of expert testimony) but juries were not favorably impressed with this type of evidence and usually found against the patient. In other instances, attorneys skilled in cross-examination and having some knowledge of medicine and surgery would draw from the defendant doctor evidence against his own interest to raise a jury issue on the question of his negligence. But in the majority of cases, unless the patient had clear, direct expert medical testimony that the defendant was careless, he was unable to make out even a *prima facie* case against the doctor.

Specialization in medicine has become the gen-

The authors are Legal Counsels for the Massachusetts Medical Society and the Massachusetts Hospital Association.

eral trend in recent years. With the rise of the specialist, there has been a corresponding lessening in the warm, human and personal relationship that formerly existed between the patient and his family doctor. Patients don't sue doctors they like and respect. There have been many instances reported by doctors who felt they had made a mistake and the patient was aware of it, but there was never any claim or suit for malpractice. Some of the consequences of the mistakes were serious, but because the doctor was kind, sympathetic and attentive, and because the patient liked the doctor, nothing was ever done which would in any way embarrass him, financially or otherwise. Once a doctor loses sight of the fact that his patient is an individual who needs sympathetic handling and looks upon him merely as a particular source of income, he invites trouble if he is remiss in any way; and even if he isn't, the patient, in order to avoid paying his bill, may claim that the doctor was careless in the hope that his claim for damages will prompt the doctor to forego collection: We have become a suit-minded people. Is it any wonder, then, that given the slightest provocation or opportunity, Mrs. Enceinte will sue Dr. Levaspunge for any fancied or real grievance?

In a malpractice case, a patient must prove negligence on the part of the doctor, but also that this negligence was a probable cause for the injury sustained. If either element is lacking the patient cannot collect. In order to establish the first element, the patient's attorney must show that the doctor did not use the accepted treatment. This is usually done in one of three ways: First, the patient may testify that the doctor admitted that he was wrong; second, a recognized medical textbook can be produced, which contains medical statement or opinion that the treatment rendered was not accepted practice; third, the defendant himself, under cross-examination, may be drawn into a statement that suggests he did not use ordinary care and skill in his treatment of the patient. The defense attorney in turn tries to establish through the defendant and his experts that the treatment *was* the accepted one. The fact that there might have been a different way to treat the patient is of no consequence. In his treatment of a patient, a doctor cannot prescribe or attempt medically untried procedures, or those that are still in the experimental stage. The only issue is whether or not the doctor followed the accepted standard of practice.

The fact that injury was caused, or that infection set in, or that recovery was delayed is no evidence of negligence. There must be some clear and direct medical evidence that the doctor failed to use and exercise ordinary care. If the medical witness, whether he be the defendant or an expert on his behalf, has ever written a book he has to be doubly sure of his testimony. More than once, an expert medical witness has been in the uncomfortable position of trying to reconcile two apparently inconsistent statements or opinions, one which appears in a book he wrote, and the other which he has just given from the witness stand.

If a doctor keeps up with all the advances in medicine, follows the accepted practices and procedures, keeps orderly, adequate and neat records, he has gone a long way in protecting himself in the event of a malpractice suit. Too much stress cannot be placed on the importance of records; they carry great weight with juries.

Doctors do sometimes make mistakes, so do lawyers (even Homer nodded) but, unfortunately for the doctor, his mistake can result in a deformity, paraplegia or death and juries nowadays are more sympathetic to patients than they are in trying to preserve the good name of the doctor.

Sometimes in the discharge of his duties and in the interest of his patient, the doctor finds it expedient to employ other associates or professional help, hospital facilities or other specialized services. This raises the question of the doctor's responsibility for the negligent acts of these others. In law, it is called the "Master and Servant Rule" or the "Doctrine of Respondeat Superior." It is based on the principle that whoever expects to derive an advantage from an act done by another for him, must as a result assume responsibility for consequent injury sustained by any third party involved. A few examples will illustrate the rule.

Employees

There is a definite liability of a doctor for the negligent acts of his acknowledged employees, such as nurses or technicians. The only requirement is that the negligent act be committed by the employee during the course of employment, or within the reasonable scope of such employment.

Partners

When doctors associate together as partners in professional practice, all are liable for the professional negligence of any of the other partners, as fully as if each partner were present and participating. The liability is founded on the implication of mutual agency between them.

Substitutes

When a doctor is unable to personally attend his patient, the problem of a substitute arises. He recommends another doctor, leaving to the substitute the

determination of the means and the way the patient should be treated. The attending doctor is legally bound to exercise ordinary care in making the recommendation and the recommended doctor must have a reputation which is up to the standard presently attained in the community. Only the negligence in selection may be a basis for conviction; the attending doctor is not generally liable for the negligence of the substitute, since the latter is an independent contractor.

Anesthetists

The cases uniformly hold that a surgeon is not liable for the negligence of the anesthetist unless such negligent acts of the anesthetist are committed under such circumstances as impose a duty on the surgeon to correct the anesthetist. To hold otherwise would impose liability on the surgeon for all acts and recommendations of similar specialists, whose actions are not subject to the dominion and control of the surgeon.

Interns

There is no unanimity of opinion on the responsibility of a doctor for the acts of an intern; some courts hold that he acts as the agent of the doctor in carrying out his orders. Others hold that, although he carries out the orders of the surgeon, his services are charged for by the hospital, and the hospital acts as the employer: Carrying out the doctor's instructions, therefore, does not alter the master-servant relationship between the hospital and the intern. The overwhelming weight of authority holds that when employees of a hospital are negligent in carrying out the surgeon's instructions, the surgeon is not liable unless it can be shown that he was negligent in giving the instructions or selecting the person to carry them out, or that he was present and could have avoided the injury by exercising due care.

Every so often, in reading an Appellate Court's decision involving malpractice, the expression *"res ipsa loquitur"* will appear. The expression means that the accident or occurrence speaks for itself. It was formerly applied only in non-medical negligence cases where an injury to some person occurred on account of an instrumentality which was under the exclusive control of another, one which did not ordinarily cause injury if employed with care. Recently, however, some courts have applied the doctrine to malpractice cases where death or injury occurred while a patient was under anesthesia, with no knowledge of what had transpired.

The application of this doctrine creates the inference of negligence on the part of the doctor. It relieves the patient of the necessity of proving the alleged negligence by competent medical expert testimony, and it shifts to the doctor the burden of proving that he was free from any negligence. The trend in recent years has been to apply this doctrine in all cases of injuries sustained by patients while in the operating room.

Admissions Against Interest

A doctor's admission or declaration against interest is generally a statement made out of court, inconsistent with his defense and amounting to proof against him. The admission usually consists of the following words: "I'm sorry it happened, it's all my fault, I should have operated sooner," or "I should have taken more X-rays before attempting to reduce the fracture." The fact that the patient testifies that the doctor made such an admission is sufficient to get the case to the jury even though the doctor denies ever making such an admission. Admissions are always formidable weapons in the hands of the opposition, but fortunately, most courts do not look with favor upon admissions as proof, and especially as sole proof.

Foreign Bodies

Probably no type of foreign-body case has caused as much disagreement on the question of the doctor's liability as has the famous "sponge" case. Decisions in the various states cannot be reconciled; the prevailing authority, however, holds that a surgeon who performs an operation at a hospital not owned or controlled by himself, and who is assisted by hospital employees, is not responsible for the mistake or negligence of these employees in failing correctly to count the sponges used in the operation, with the result that a sponge is left and sewed up in the patient's body cavity. The trouble arises, however, when it can be shown that the surgeon, by exercising ordinary care, could have noticed that a sponge was still present in the cavity. There may be no negligence on the part of the surgeon in leaving the sponge in, but failing to remove it when all signs point to its presence is weighty evidence of malpractice.

When during the course of an operation, the doctor breaks an instrument and part of it remains in the patient's body, the doctor is bound to inform the patient of this fact. Broken instrument cases can be successfully defended if the evidence shows that the patient was informed of the breaking and is given

proper care thereafter until the foreign body is removed.

Apart from the "sponge" cases, any case involving an overlooked foreign body is extremely difficult to defend. No valid legal excuse, for instance, can be found when a hemostat or a like instrument has been left in a patient's body.

Statute of Limitations

Most states have statutes fixing the time during which malpractice actions must be commenced: The usual period is two years after the cause of action occurs. There is hopeless conflict in the courts as to when a cause of action does occur, but the majority hold that it occurs at the time the negligent act is committed, rather than at the time when the relation of doctor and patient terminates, or on the date the patient discovers that he has been injured. The failure to remove a sponge at the completion of an operation may not cause any immediate damage; the damage may not show up for some time. Nevertheless, most courts take the position that the cause of action occurs at the time of the original deposition of the foreign body.

However, if a doctor fraudulently conceals a cause of action from a patient, the statute will not begin to run until the cause of action is discovered or could have been discovered with reasonable diligence. Mere silence on the doctor's part, or mere ignorance on the patient's, however, does not constitute fraudulent concealment by the doctor. Fraudulent concealment must be a positive act designed to conceal facts from the patient, or to prevent him from filing suit within the two-year period.

I have tried in this article to give several specific examples of the laws which govern medical malpractice suits today. But the best summing-up of this complex problem, in my opinion, was given recently by the Honorable Paul G. Kirk, Judge of the Massachusetts Superior Court, at the end of a malpractice case which lasted twenty-one days:

> "Now the law is a practical science, and its function or object is the adjudication or the determination of actual controversies in life. The determination of actual controversies is not to be made on a whimsical or arbitrary basis in each case, but rather is to be done by the application of settled principles to the facts of the particular case. The settled principles which are to be applied are the law. They are derived from experience, and as one great Judge said: 'The life of the law is the experience of mankind.' These cases which you are considering illustrate the fact that recourse to the courts of law must be had even when the practice of a highly specialized and merciful profession is involved. Neither you nor I as individuals are competent to pass upon the degree of skill which the defendants exhibited in these cases but, sitting as a trial tribunal, we have had before us expressed the opinions of men who are engaged in that practice, whose opinions may be of aid to us in arriving at a conclusion. I suppose it may fairly be said that the medical profession at large is dedicated to the alleviation of pain and suffering among human beings and prolonging of human life and, as has been suggested to you in argument, medical science is not like a mathematical and exact science. The result which may follow treatment in a particular case, even in a simple case, cannot always with certainty be foretold, although there may be classes of cases where the results may be probable. We can say as well, I believe, that medical science is not a static or fixed science, but that it is a progressive science. The horizon of knowledge with respect to the ills which afflict the minds and bodies of men, and with respect to their treatment, is constantly being broadened. This is largely due to the study, research, experiments and discoveries of men who are engaged in the profession. For example, a few years ago the use or even the identity of the drug penicillin was unknown, but today you realize that its use is common. It is approved, and it may in some cases be considered imperative treatment.
>
> "One other generalization: I suppose that if there is any single unchallengeable, incontrovertible fact in life, it is the inevitability of death. It is a universal fact, and it is a universal fate. The mere fact that death occurs after or during the course of medical treatment, in and of itself, does not afford the slightest evidence that those who gave the treatment were negligent. Similarly, the fact that a person suffers during the course of treatment given, in and of itself, is not the slightest evidence that the treatment given was negligent or was not in accordance with good practice.
>
> "The law recognizes that a man of good judgment even in exercising his best judgment may make a mistake. If he is a man of good judgment and exercises his best judgment and makes a mistake the law imposes no liability.
>
> "Summed up then, the implied engagement of a physician or surgeon with his patient does not mean that he guarantees a good result, but it does mean that he possesses and he will use reasonable and ordinary care and skill generally possessed and used by others in the profession in the community in which he lives, and that he will use his best judgment to produce a good result."

Editorial

TO "MEND" OUR WAYS?

There is much in today's world upon which the hidebound pessimist may nurture his tragedy-filled soul. Consider the frightening population problems that threaten our grandchildren. Consider the horrors of atomic war that seem even closer. Consider the not-inconceivable effects that uncontrolled staphylococcal sepsis might well have on our closely knit urban groups. In regard to such considerations, the pessimist is characteristically a fatalist.

The intelligent optimist also accepts these portends as prophetic but sets out to do something constructive about them; to find a possible, rational solution for these threats to mankind.

The MEND program seems to have much of the constructive thinking about it that can be attributed to such an optimist. Begun not long ago, in 1951, the Medical Education for National Defense program was established through the Association of American Medical Colleges and the Council on Medical Education of the American Medical Association and has devoted itself to the development of methods of emphasizing in our medical schools and to the schools' faculties and students those aspects of medical education that might be of importance in times of national emergency.

The present Berlin crisis gives further compulsive impetus to such an educational program. Whether you hold to the more pessimistic views on Berlin expressed by Albert Wohlstetter in the January issue of *Foreign Affairs,* or the more optimistic thoughts of a companion article in the same issue by George Kennan, makes no major difference. What really is important is that in such times of international stress we have a clear, sensible program of training on problems of medicine in National Defense. The MEND plan appears to have a potentiality for fostering such thinking within medical schools.

As now set up and active in 65 of the 81 medical schools of the United States, the MEND program has shown itself to be voluntary, containing no ulterior Federal regimentative motive, nor camouflage for Armed Forces recruitment. The National MEND office has only advisory duties and leaves to each school its own choice of organization. From the Department of Defense is supplied each year to each member medical school $11,000 to be used as desired by that school to improve student and faculty understanding of certain medical problems of national defense. What part and how extensive a part this program has to play in a school's curriculum is entirely up to the particular school in question. Hopefully, a coordinator is chosen to correlate such teaching with the basic sciences and clinical departments. For example, further understanding of the biological effects of radiation and the use of radioactive materials might well be integrated into the medical curriculum; or the physiopathological disorders produced by extremes of altitude, speed, noise, temperature, pressure and acceleration might be included; or education into the problems of mass disaster, first-aid and casualty care might profitably be added. The MEND program also makes funds available for faculty travel to attend certain federally supported symposia on such topics.

Under this program, we would therefore expect our medical students to be better indoctrinated in their future responsibilities to the Nation in National Defense, whether in a civilian, academic or military role. It seems fitting for Harvard to add itself to the list of medical schools already endorsing the MEND program.

J. R. B.

STIMULUS FROM OLYMPUS

TO MEND OUR WAYS

Thomas A. Warthin, '34

"Never let the young forget that one cannot lose who serves his country."

THE Executive Committee Meeting of the Aesculapian Club of October 21 had been long and lively. It was after ten o'clock when we adjourned and began our separate journeys home. My sentimental mind, warmed by the happy companionship of the evening and the uncorked refreshment, urged the car through the Fens to the end that I might drive by our fountainhead, the Harvard Medical School. Crossing Park Drive, I drove slowly up Avenue Louis Pasteur, Boston's replica of the Normandy Beachhead. There are those cads who would rename this noble but deeply pockmarked way, "Edward Jenner Lane."

At the end of the glorious vista stood The School, lights dim on the Library floor of Building A, while the other buildings seemed ghostly gray piles of ancient Grecian marble. Suddenly, a half-moon broke through the clouds and like a spotlight illuminated the

Dr. Warthin's remarks were originally given at the mid-winter dinner of the Aesculapian Club.

Quadrangle in an Olympian glow. I drove slowly on, enthralled, forgetting the hour and the place. A quick jolt of the car, a loud bang, and a sudden pull on the wheel to the right, brought me back to earth and to the unhappy realization that I had run into the large shell hole in front of Boston Latin School. Finding an unoccupied spot near the entrance to English High School, I pulled over to the curb, disembarked, and surveyed the damage. The right front tire was flat on the bottom and had received an unsuturable laceration. I proceeded to replace it with the spare. My gently cursing presence frightened the young lovers parked around me to quieter pastures than Louis's. I was alone.

By the conclusion of the change, I was exhausted, and leaned against the car door to regain my strength. A sudden wave of soft vertigo swept over me and I fell to my knees, drowsily indulging my thoughts for the many thousandth time against my overindulgence:

"There is a moment when we lie
Bewildered, wakened out of sleep,
When light and sound and all reply:
That moment Time must tame and keep."*

As the spinning sensation ceased, I lifted my head and found a young, hawk-nosed, bearded man, dressed in the simple flowing robes of Ancient Greece standing beside me. A sword was buckled to his waist. Believing him to be a young master of the classics from the Latin School, I was about to reassure him that I would be able to get home by myself when I recalled the memorable 1946 experience of the late Dr. Fritz Irving. This was not the face or figure of Aesculapius as described by Dr. Irving. And yet, pinned to his tunic were the staff and single serpent, symbol of our patron, while on either shoulder glimmered a single golden star.

As if answering my unasked questions, the apparition spoke, "I am Machaon, Brigadier General Machaon, son of Aesculapius, and Surgeon of the Grecian Expeditionary Force against Troy."

Bracing myself sharply to attention, I saluted smartly, but then relaxed, thinking this was only Joe Gardella, indulging a pre-Halloween prank. Divining my thoughts his stars gleamed angrily for a moment as he said testily, "I can talk to you only for a few minutes. It is getting very difficult to get here from Olympus; there are so many satellites orbiting around the Earth. The Russian sputniks seem to be occluding the Olympian-Boston axis."

"Where is your father, our patron, Aesculapius?" I asked.

"Travel to Boston has become too dangerous for him this past year. Besides," he added with a filial leer, "since Dorothy Murphy moved out of the Dean's office, he hasn't had as much urge to return."

"But she has only moved to the west side of the building, into the Alumni Office," I expostulated.

"Father says she now shares a suite with a distinguished gentleman who runs out asking for money for Harvard whenever he has tried to visit her. And father, of course, isn't an Alumnus; and never collected fees while he was in practice.

"My visit to you at Harvard arises from my concern respecting certain attitudes toward military medicine at the School. You are Chairman of the Military Affairs Committee."

Since this was a statement and not a question, I again clicked to attention as he continued, "Your committee is dead. In fact, I would say it was suffering from *rigor mortis,* did I not detest the Roman tongue."

"But during the World Wars, general hospitals from Harvard gained much acclaim stemming the crimson tide," I countered. "It is only during peacetime that we slack off."

"These are my very points," Machaon replied. "I've heard that the Association of American Medical Colleges decries Harvard's lassitude in medical education for defense, and so do I. This is not a time of true peace, and you demonstrate an extraordinary passivity of your attitudes. Your country's laws require that each young physician serve for two years either in the Armed Forces or at that temple of Pythagorean numbers, the National Institutes of Health. We on Olympus believe Paris will be handing out apples to girls for centuries to come. But my time on Earth runs short."

"What would you have us do?" I asked.

"Three things. Don't let the lessons learned during the wars be forgotten. Don't reject the tragic aspects of life. Present them to your young sons of medicine. Second, teach them also the principles and philosophy of improvisation. Harvard's fashion of doing things is, of course, the very best; yet, in time of disaster there *may* be other ways to save lives. And, lastly, never let the young forget that one cannot lose who serves his country."

"What about you and your brother, Podalirius?" I asked. "You two have very meager reputations compared to your sisters, Hygeia and Panacea, both of whom won full-time professorships while you were fighting at Troy."

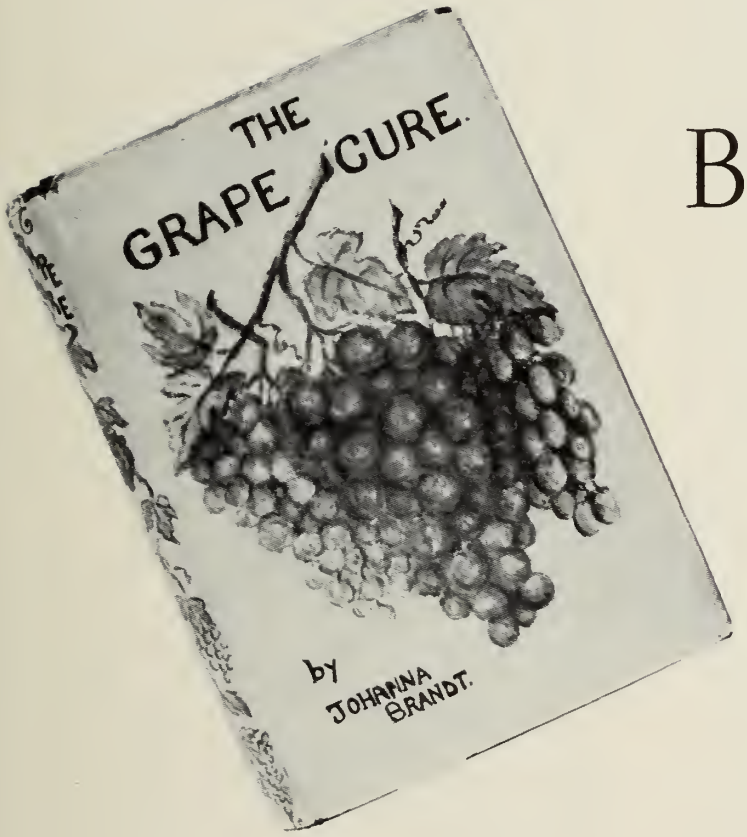
Annoyed, Machaon gathered his tunic about him. "That is not usually so. Many men have gained in experience and grown to highest maturity during their tours of military duty.

"But I must be on my journey before the satellites orbit this way again. Your American ones are particularly dangerous as they are so small you can't detect them coming. The big Russian jobs are easy to see and dodge, or you can hear the dogs barking. We hope you catch up to them soon."

I was about to say, "So do we," when the moon again appeared with blinding light. There was a rush of air and a fading cry, "So long, Harvard."

*Archibald MacLeish.

SPECIAL BOOK REPORTS



Sydnor B. Penick, 3d, '58

The author wishes to call to the attention of his fellow Alumni a few volumes which have recently come into his possession. These together might be said to comprise a selected bibliography on food and health faddism, a field ridiculous to the uninitiate physician but most vital to that doctor who finds that he must deal professionally with its disciples. I have found these monographs highly entertaining, for they are most certainly ridiculous. Nevertheless, I feel that they must often encourage an attitude inimicable to proper medical care and hostile to the medical practitioner. I trust that the following will provide the reader with some entertainment, and I hope that it will provide him also with the arms of foreknowledge, should he be faced with the unenviable task of rendering orthodox medical treatment to a patient who would prefer the Grape Cure.

The Grape Cure, by Johanna Brandt. Published under the auspices of Harmony Centre, Inc., New York City. Twentieth Edition, 1956. 192 pages. $3.00.

Dr. Brandt (of Naturopathy) brought the Grape Cure to us from South Africa and herein expounds the therapeutic marvels of the grape diet. She knows whereof she speaks, for in an early section, she tells us how for nine years she battled cancer in her own body, how the cancer fed on the "animal food" which she ate, and how she suffered from "horrible and disgusting cravings for blood — for beef and pork and rich blood-sausage." After fasting and purging herself for years, Dr. Brandt "accidentally" discovered the grape, a food which cured her cancer and to the amazement of the medical profession made X-ray evidence of her cancer disappear in six weeks. Dr. Brandt resolved to give her discovery to the world, and she describes her early clinical trials with the grape cure. An example of her case reports follows:

There was a patient in the Bronx — a middle-aged woman, the mother of a large family. When I first visited her, she said she was in the final stages of cancer of the stomach and bowels. Vomiting night and day! When this stage has been reached, it is not considered wise to begin drastic treatment. But that death chamber was charged with so much filial love and passionate anxiety that I had not the heart to refuse my help. Just a few grapes were given at that time. Within twenty-four hours the vomiting stopped. The desperate strain was relieved. But the emaciated victim went steadily down, passing through all the stages of debility and weakness until she actually reached the unconscious stage. The grim struggle for life lasted nearly two months. One healing crisis succeeded another. Finally her legs began to swell.

"This is the end," one of her sons whispered.

"Yes," I replied. "This is the end of the Cure." The poisons had now been collected in a safe place. The family members were instructed to wrap the swollen limbs in grape compresses in order to open the pores. In a day or two — tomorrow the swellings would probably subside.

"Tomorrow" found a distinct improvement in the condition and soon no trace was left of these dropsical symptoms.

Wonderful to relate, the hard mass in the ascending colon had been disappearing gradually. Nothing was left of that. And the stomach was now so normal and strong that the patient's incessant demand was for "Food." (Pp. 45-47)

The Grape Diet itself is extremely simple. It involves first a fast, then a period of eating grapes only, then a further period of adding certain other fruits and raw vegetables. Purges are of course of great importance. Dr. Brandt's theoretical hypothesis is quite striking: 1) "Mind" is most important. 2) "Mind" operates through magnetism. 3) To purify and build up magnetism, one fasts, does deep-breathing, takes water treatments and sun baths, has spinal adjustment and exercise; and of course, the Grape Diet.

The major emphasis in this volume is on the prevention and cure of cancer by the grape diet. The causes of cancer are outlined: The human body cannot use "inorganic substances." These are therefore deposited by Nature in some "out-of-the-way place," where a Cancer is subsequently formed. Numerous examples are given of cancers which respond to the grape. Cancer of the tongue is cured by "a tablespoon of grape juice every half hour." Cancer of the cervix responds nicely to grape juice douches, and cancer of the rectum may be attacked with grape juice enemata. The mechanism of action of the grape is outlined for us:

Abnormal growths, cancers, tumors, ulcers, abscesses and fibrous masses *seem to be dissolved* by the powerful chemical agent in the grape. Diseased tissues and fatty degenerations, every form of morbid matter, is apparently broken up into minute particles and thrown into the bloodstream to be carried to the organs of excretion. No wonder then that complications arise. To the inexperienced person it is disconcerting to find strange and new symptoms of disease developing under the Grape Cure. He needs someone with experience to explain to him that poisons which have been locked up in the system for many years have broken loose and are running riot in the blood. Hence that unusual rise of temperature, that eruption on the skin, those splitting headaches, those attacks of retching and purging, that discharge of mucus, those undue sweatings. The anxious mind of the patient should be set at rest by the assurance that all these are highly favorable symptoms of the process of purification being carried on internally — *positively prove that he is still vital enough to respond to the treatment.* The avenues of excretion — the bowels, kidneys, lungs, and skin — are still in good working order. Let him then closely examine the stools, the urine, the perspiration, and let him *rejoice* with the appearance of every new evidence that Nature is still able to cast out the poisons that have been dislodged by the magical action of the grape.

Traditional cancer cures are felt by Dr. Brandt to be outmoded:

No one in the world can force you, if you are of age, to undergo an operation. No surgeons, no medical laws can compel you to submit to the dreaded scalpel. Too often an operation is the first resort and you are rushed to the hospital in a dazed and panic-stricken state. It should be the last resort. Every other method should have been employed before you permit the delicate nerves and tissues of your body to be severed.

There is a permanent interruption in the circulation and in the flow of the vital magnetic fluid. In this book we do not dwell on the complications arising from these operations, the ruptures, adhesions, abnormal growths, weak hearts, shattered nerves, and ruined digestions. Get reliable books on the subject and read — study this terribly important question from every point of view. (pp. 137-138)

This review could not have ended better than with the ringing words of Dr. Brandt:

Charged with the magnetism of the sun, this Queen of Fruits, more than any other, restores and revitalizes the depleted forces of the cancer patient. Every tendril is a living receiver of cosmic magnetism. Its many-pointed leaves, forming many triangles, absorb vital essences from the air.

A perfect grape is circular in form and a bunch of grapes resembles a triangle. Students of mysticism and occultism know what these two symbols — the circle and the triangle — represent.

Raw Vegetable Juices, or What's Missing in Your Body, N. W. Walker, Doctor of Science. Norwalk Press, Wickenburg, Arizona. 121 pages. $2.00.

Vegetable juices in various combinations are prescribed for numerous diseases. Conveniently arranged for self-treatment by diseases in alphabetical order. For example:

TUMORS
in Brain
in Bones
in Liver
in Uterus

Growths due to a lack of sufficient organic elements and caused by the excessive use of concentrated inorganic foods, mostly flour products. 61,62 30,40

The numbers refer to vegetable juice formulas and are easily found:

61:	Carrot	10 oz.
	Spinach	6 oz.
62:	Carrot	8 oz.
	Spinach	4 oz.
	Turnip	2 oz.
	Water-Cress	2 oz.

Obviously, for the devotee equipped with this handy guide, the physician is superfluous. However, Dr. Walker does concede that:

> Certain prevailing laws require that contagious and infectious ailments be treated under the direction of a doctor. Whenever possible, we should seek a Doctor who is familiar with the benefits which are derived from Colon irrigations AND the use of fresh vegetable and fruit juices and diet, instead of drugs, serums, and other "shots."

Banish Constipation and Colitis, W. H. Graves, D. C. Publisher not given. 149 pages. $2.00.

This monograph is touchingly and perhaps appropriately dedicated "to my dear mother." In the Introduction, Dr. Graves classifies his patients as follows:

Group 1: Good — those of you whose bowels move naturally three times daily.

Group 2: Fair — those with two movements daily.

Group 3: Poor — those with one movement daily. For lack of proper health education, the majority of people entertain the idea that one movement daily is perfect. This idea is erroneous. This altered function is disease-producing — slowly but surely.

Group 4: Dangerous — those with no movements daily or those with no movements at all unless poisonous laxatives are taken.

The book is conveniently divided into several chapters, each of which has an appropriate quotation or two to set the proper tone. A chapter entitled "Unbelievable Colons" is prefaced with words attributed to Edison: "In the race of life the man with educated bowels will eclipse the man with an educated brain." I will not dwell on this chapter, save to quote one sentence: "The colons of many people are a reeking mass of worms and poisons and are swarming with millions of bad bacteria."

Dr. Graves includes a list too long to cite of the diseases caused by constipation. Included is everything from acidosis to dark circles under the eyes, discharge from the navel, smallpox, and of course, cancer. The causes of constipation are outlined and included among others are, "Drinking with Meals," "Ignoring the Call of Nature," "Subluxations of Spine and Hip bones," "Incorrect Methods of Taking Enemas," "Quinine," "Chewing Gum," "Sexual Dissipation," and "Compression by Clothing."

Dr. Graves is primarily a clinician. He does not give us hypothesis and theory, but rather plunges right into therapeutics and "extends to every reader of this book a friendly mental hand-clasp, personal interest, a word of encouragement, and a smile of good cheer! I am with you from start to finish — *Let's cure that constipation!*"

The follower of Dr. Graves' therapeutic program is a busy man indeed, but if we are to share Dr. Graves' honest faith in his mission, it's worth every moment. Before arising, one must practice abdominal massage, first gently punching the abdomen, then kneading the whole abdomen to break up the contents of the colon, and finally stroking the ascending colon, *across* the transverse, *down* the descending toward the rectosigmoid. A thoughtfully prepared anatomic diagram is included. One doesn't move one's bowels any old way. An entire chapter is devoted to the proper method — "Squatting, Nature's Method." This is described as "Nature's Position of Evacuation." Further:

> From time immemorial, from the dim ages of evolution on through the days of savage tribes, squatting has been handed from father and mother to son and daughter. This existed up to the time when *civilization* discarded this primordial and dateless practice, as it did many other natural and vital laws, thereby causing the majority of suffering to which the human race is heir today. Fortunately, however, this primitive practice is still recognized by our subconscious mind and even today will respond to this simple, natural method of bowel elimination — *squatting*.
>
> Its commanding position seldom encourages any other than the one that should predominate the mind at this time. When in this position your whole body seems to sense that you are there for a definite, all-important purpose and is ready to render all necessary aid. There is a vast difference between the method cited above and the

listless practice of just sitting there musing upon other things or probably reading a thrilling book or a shocking newspaper story.

Another entire chapter is devoted to "The Enema," and is most interesting. Dr. Graves provides us with a little-known historical fact when he notes that enemata are mentioned in the earliest medical writings. He states that the discovery of the enema was attributed to the ibis: "This bird would place water in its beak and inject it into its rectum." Dr. Graves is evidently a man of culture and I'm sure would commend the reviewer's delicacy in not quoting further from this quite graphic and personal section.

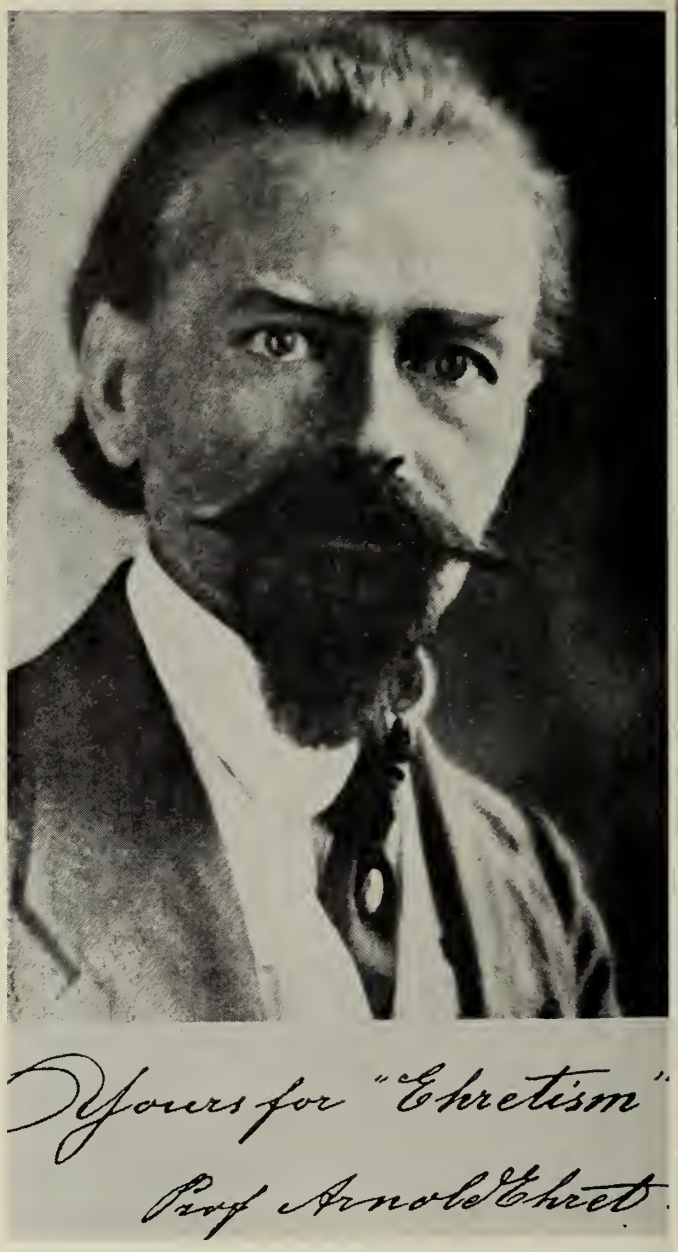
Beside the routine of massage in the morning, squatting at least thrice daily, and frequent, thorough enemata, there is more to be done. A temporary juice and soup diet is recommended during the cleansing phase and a dollop of one or the other is to be taken every hour or two. Papaya juice is apparently equally effective by rectum or by mouth. The practice of deep abdominal breathing is of utmost importance, for it "massages all of the intestines, strengthens the diaphragm, helps peristalsis, builds red blood cells, and *increases your energy.*" A cold Sitz bath before retiring is said to be "valuable for toning up the rectum, the bowels, and all abdominal organs in addition to promoting sound, restful sleep." Acidophilus, the good bacterium, must be implanted at the conclusion of the cleansing process. Several bottles by mouth is the recommended dose. Obviously, it is not the work of an hour to cure that life-long constipation, and Dr. Graves gives us not only a treatment, but also a busy and productive way of life.

Poison in Your Pots and Pans, J. I. Rodale, Rodale Books, Inc., Emmaus, Penna. 63 pages. $1.00.

In which it is shown that 2 series of goldfish, matched for weight and age, will react somewhat differently to water boiled a) in aluminum pans and b) in glassware. The a) goldfish go belly-up in no time while the b) goldfish survive. The natural conclusion is drawn that, since humans undoubtedly behave in an analogous though less dramatic fashion, we should chuck out the aluminum-ware instanter.

Prof. Arnold Ehret's Mucusless-Diet Healing System — A Scientific Method of Eating Your Way to Health, by Prof. Arnold Ehret. Ehret Literature Publishing Co., Los Angeles, 1953. 195 pages. $2.00.

In this important monograph, the renowned Professor Ehret explains all disease on the brilliantly simple basis of *constipation.* He extends the usual meaning of the word to include "a clogging-up of



the entire pipe system of the human body." He nevertheless emphasizes the more traditional connotation of the word by pointing out that "the average person has as much as ten pounds of uneliminated feces in the bowel, continually poisoning the bloodstream and the entire system." Mucus is the special devil for this Luther of science; mucus-containing foods clog the hollow pipes of our body. Occasionally, Nature attempts to rid the body of this waste and the result may be — a cold, or if the cleansing process digs deeper, pneumonia. Nephritis is a natural attempt to rid the body of that sticky poison, albumen. Goiter is "a sane deposit by Nature of tremendous waste to keep it from entering the circulation," and stammering is a "special accumulation of mucus in the throat, interfering with the functioning of the vocal chords." The reviewer noted a small inconsistency in the Professor's general hypothesis of disease when he explained mental disease as "gas pressure on the brain."

The author's incisive theory of all our ills has a point of great moment to the therapeutic enthusiast — all drugs are stored indefinitely with the mucus in the body. This leads to a relentless accumulation of vile poisons.

A section of this work deals with the Professor's "Formula of Life" and the "New Physiology." V=P−O, in which V=Vitality, P=Power, and O=Obstruction. The relation to mucus and generalized constipation is obvious and need not be emphasized. The author's theories of physiology must humble us with their iconoclastic clarity. First, he announces, "The Lungs are the Pump and the Heart is the Valve — and not the opposite as erroneously taught by medical physiology for the past 400 years." Second, "Metabolism, or the 'Science of change of matter' is the most absurd and dangerous doctrine-teaching ever imposed on mankind." The Professor points out that food is absorbed into the body as ingested and that one good helping of mashed potatoes and gravy can clog the pipes for years. Further points in his theory: a) Protein food is sticky and to be condemned — man better assimilates his nitrogen from the air. b) White blood corpuscles are sticky waste. c) Blood-building is done best by the carbohydrates in cherries or blackberries. These fruits, Professor Ehret points out with his overwhelmingly simple clarity, "look like blood."

The Professor's therapeutics are quite simple. First, one must fast.[1] Grave illness may assail the novice faster because he is excreting via the bloodstream pounds of accumulated sticky waste and poisonous drugs. The worse the faster feels initially, the better he will feel once he is finally cleansed. For proper cleansing, fasting must be accompanied by thorough purging.[2] The final step is a complete revision of one's diet[3] with reference to Ragnar Berg's tables of acid-binding versus acid-forming capacity, which the Professor has thoughtfully included.

1. *Rational Fasting, for Physical, Mental, and Spiritual Rejuvenation.* Prof. Arnold Ehret. Ehret Publishing Co., $1.00.

2. *Innerclean Herbal Laxative.* Innerclean Co., Los Angeles. 60¢ and $1.00 per pckg.

3. *Thus Speaketh the Stomach,* 1952. Ehret Publishing Co., Los Angeles. 25¢. (A novel approach in which the author, Prof. Arnold Ehret, lets the stomach, the germinating center of all disease, tell the story of the tragedy of man's nutrition.)

A rather puzzling section on sex and sex diseases includes the following delightful bit which could be criticized only for its possible irrelevance:

> No one of western civilization knows what genuine 'love vibrations' mean from a body with clean blood composed of such ingredients that produce electric currents and static electricity sent out and received by 'wireless' — hair. The beard of man is a secondary sex organ. Beardless and hairless and bald makes for a 'second-rate' sex quality in every respect.
> See Judges 16: 13-18

The relation between static electricity, hair, and mucus is somewhat murky and the reference to Judges a bit unusual. However, the final section on Motherhood and Eugenics, as embraced by the Professor's all-pervading theory, is crystal clear. Menstruation, he maintains, is elimination of waste, and those purified by diet no longer have periods. The "Madonna Mystery" is explained in terms of such "inside purity." The synthesis of diet and eugenics is forged by the following little-known historical vignette:

> During the Black Plague centuries ago, a number of young people took refuge together in a house in the neighborhood of Florence, Italy. For weeks they had nothing to eat, and then, of course, only sparsely. They became married and generated the family of the Medici. . . .

No previous writing has explained the mystery of religion and the course of man's history in terms of constipation. If for no other reason, surely this little monograph is worthy of our attention.

Conclusion:

The reviewer wishes to point out that he bought these books in a health food store and has seen them in many others. Visiting a health food store is a salutary experience for any physician. I spent some time chatting with the proprietress of such a vitamin bazaar in California. She was obviously more zealot than charlatan. We fell into a discussion of her 13-year-old son, and in quite animated and indignant phrase, she described the lunches in the school cafeteria, which were to her vitamin and mineral seeking eye, not only devoid of all good, but positively poisonous. "Sticky mashed potatoes," she screamed, her bosom heaving with the honest emotion of protective motherhood, "and sticky gravy!" I asked what she would have her son eat at midday and she gave me in some detail the lunch which she packed for him daily.

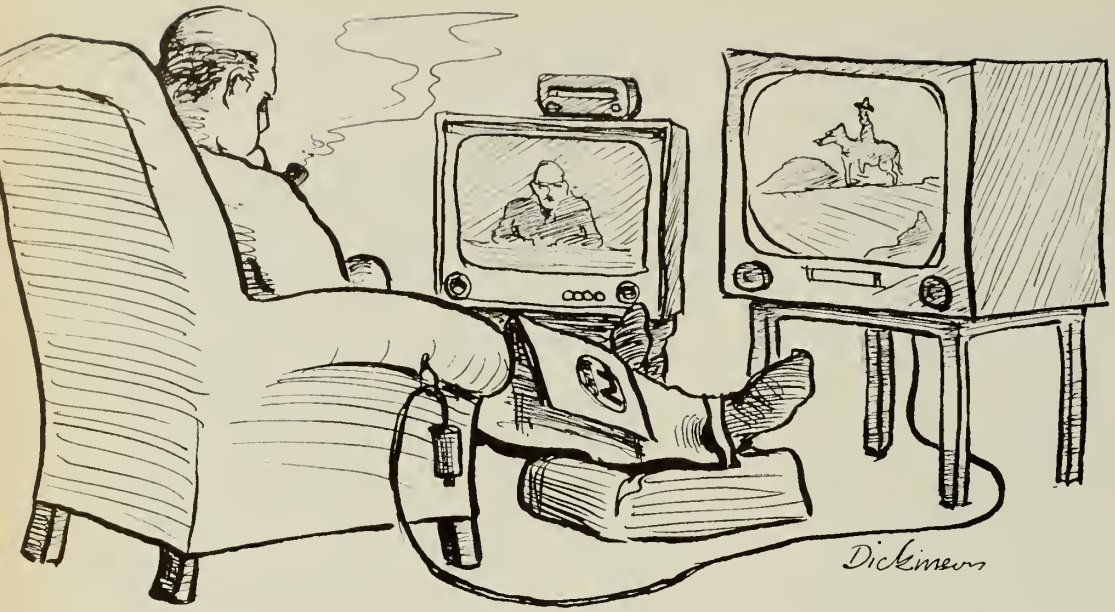
The Carte de Jour

Sandwich: Home-made, organic-grown, whole grain wheat bread, with cocoa butter, non-hydrogenated peanut butter, and liberal topping of calcium bone meal.
Beverage: Soya emulsion in a thermos bottle.
Dessert: A handful of sunflower seeds.

"And doctor," she said, "you may laugh, but he hasn't had a cold or a cavity since I started it."

Her parting words still give me momentary pause over my breakfast toast. She eyed me gravely and chanted a succinct warning —

"The whiter the bread the sooner you're dead."



E. E. N. T.

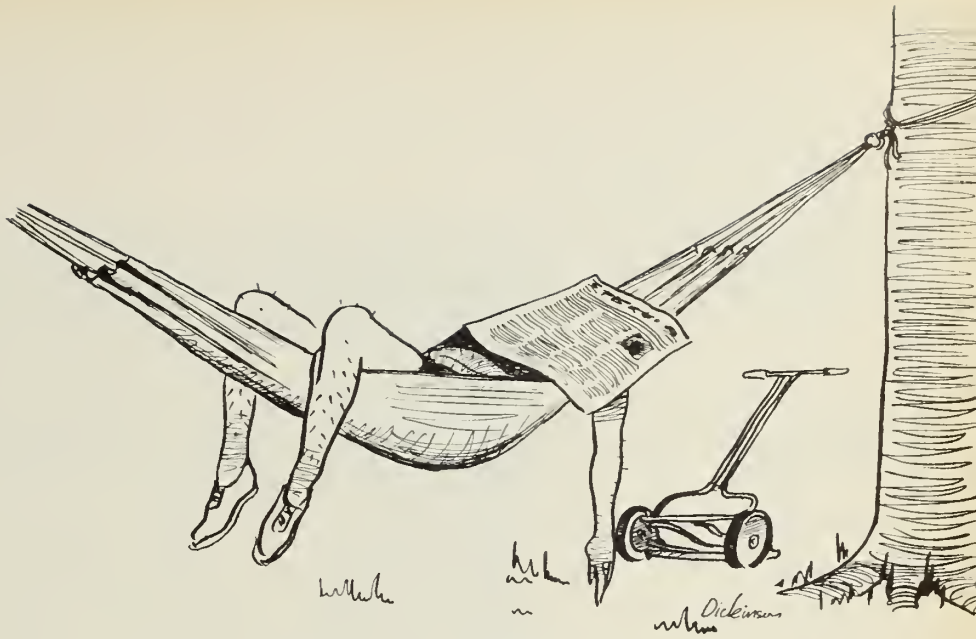
DOCTOR

PA

Metabolism . . .

HOBBIES

V



Anesthesia . . .

Trace metals . . .

Electrolytes and fluids . . .

The Voyage:

Hans Zinsser and Hart Crane

Robert Hayes, '59

HAVANA ROSE

"Let us strip the desk for action — now we have a house in Mexico. . . . That night in Vera Cruz — verily for me 'the True Cross' — let us remember the Doctor and my thoughts, my humble, fond remembrances of the great bacteriologist. . . . The wind, that night, the clamour of incessant shutters, doors, and the watchman tiptoeing the successive patio balconies trundling with a typical pistol — trying to muffle doors — and the pharos shine — the midwind midnight stroke of it, its milk-light regularity above my bath partition through the lofty, dusty glass — *Cortez* — *Cortez* — his crumbled palace in the square — the typhus in a trap, the Doctor's rat trap. Where? Somewhere in Vera Cruz — to bring — to take — to mix — to ransom — to deduct — to cure. . . .

"The rats played ring around the rosy (in their basement basinette) — the Doctor supposedly slept, supposedly in #35 — thus in my wakeful watches at least — the lighthouse flashed . . . whirled . . . delayed, and struck, *again, again*. Only the Mayans surely slept — whose references to typhus and whose records spurred the Doctor into something nigh those metaphysics that are typhoid plus and had engaged him once before to death's beyond and back again, — antagonistic wills — into immunity. Tact, horsemanship, courage, were germicides to him . . .

"Poets may not be doctors, but doctors are rare poets when roses leap like rats — and too, when rats make rose nozzles of pink death around white teeth. . . .

"And during the wait over dinner at La Diana, the Doctor had said — who was American also — 'You cannot heed the negative, so might go on to undeserved doom . . . must therefore loose yourself within a pattern's mastery that you can conceive, that you can yield to — by which also you win and gain mastery and happiness which is your own from birth.' "[1]

Hans Zinsser

THIS prose poem, though a very slight and fragile work, records an unusual meeting between Professor Hans Zinsser and Hart Crane. What different paths both were embarked upon at the time of this meeting, for Zinsser, already a well-known bacteriologist, was en route to Mexico City, where an epidemic of typhus fever had broken out. Crane, however, set his foot upon this ship as the most promising of the young American poets of his generation. But long before this he had shown characteristics that would lead him, one year later, to vault quickly from the promenade deck of this same ship into the ocean off the Florida coast, thus fulfilling the almost inevitable destiny and fate of his frenetic and tormented life.

To the student of American literature, Crane may well complete a pattern that might be traced through Melville, Whitman, Poe and Crane — a pattern that traces the rise and fall of the romantic in American literature — a pattern whose protagonists all strove to establish a literature peculiarly American. *The Bridge* was published in April 1930, and remains Crane's legacy to mankind, a somewhat disjointed yet lyrically beautiful and conceptually magnificent rebuttal to *The Waste Land*, which in 1922 led many within literary circles to acknowledge only the sterile meaningless futility of life. *The Bridge* is seldom mentioned today outside of the classroom, or the literary conversations of those interested in the flow of American literature. It is a pity though, for there are few poems in the English language in which blank verse has been used with such force, incorporating in its style and meaning the symbols of the complex mechanical era that evolved during Crane's life. The inviolate beauty of *The Bridge* is that it joins land, river and sea with man; yet as the separateness of man from life is eased, the lonely travelers who daily cross the bridge find the more intolerable burden of continuity with life's chaos. Be that as it may, Crane, with his Marlovian devil, set forth in April 1931 on a Guggenheim fel-

lowship to Mexico to attempt a poem on the history of Montezuma, a variation on the American theme that *The Bridge* stated. For several years Crane had done no real creative work but had been led into overwhelming chaos by his habits and his alcoholic tendencies. Yet he struggled to set his life into some sort of order by setting off on this trip to Mexico, perhaps a last stand against his unrest that bordered upon insanity.

As the ship plunged south, however, the story of Crane's life now becomes the story of his death, for there is no halt to the strange dissolution of his personality. For one who had been a free and gifted lover of life had become a man riddled by fears and distrust of others, and one for whom drink, the sea's coadjutor, did but increase vertigo. By the time Havana was reached his funds were depleted by his constant drinking, and this leads us to our story.

In Zinsser's autobiography, *As I Remember Him,* we learn of the meeting of our two poets. "On the night before leaving New York, I went to a literary cocktail party of the type that was in vogue among the young aesthetes in New York at that time, and at which the cocktails were composed of 50 per cent alcohol, with glycerine and a little flavoring of orange juice. As this party I met a short, stocky, and powerfully built young man, with a friendly, heavy face under a ferocious pompadour, who was slightly tight when I arrived and who impressed me, in spite of his uncouth appearance, by his excellent choice of English. As usual at such parties, I did not catch his name, but next morning I saw him again on the ship, and found that it was Hart Crane."[2] Zinsser and his compatriot bacteriologist Castaneda soon established cordial relations with Crane, for all three were of broad erudition and the two scientists had deep compassion for the young poet. As Zinsser remarked, ". . . by that time we had developed a sympathetic friendship for him, since he was a generous, warmhearted person, obviously drinking hard because of intense unhappiness."[3]

PHILLIP HORTON, Crane's biographer, records the meeting in a manner which tells us much of both Crane and Zinsser — "Crane, with the dogged, almost animal-like affection characteristic of him, attached himself to the doctor during the trip, following him about the ship, plying him with questions concerning his work, and discussing poetry for hours on end. Dr. Zinsser, for his part, quickly recognizing his constant drinking and violent tempers as symptoms of a disordered spirit, developed a fatherly concern for Crane. Shocked on the one hand by his harsh, deliberate obscenity in talking of sexual matters and on the other hand deeply affected by the pathos and appeal of his occasional illuminations of childlike spirit, the doctor seemed, nonetheless, to understand Crane's dilemma with considerable insight."[4]

When the ship lay over in Havana Zinsser gave Crane counsel, which was received with gratification and recorded in the poem "Havana Rose" which is placed at the beginning of the story. Yet Zinsser probably suspected that Crane could no longer yield to this counsel and that his life was already consumed with despair. After dinner at La Diana, Crane borrowed money from Zinsser and became drunk with rum and while prowling the decks in search of his friend, surprised Zinsser in the act of dropping overboard a package wrapped in newspapers, which burst on hitting water to release two white rats that were quickly lost in the ebbing tide. Crane knew that the rats were two of the four typhus-infected rats that Zinsser was carrying into Mexico for experimental purposes, and in his drunken state immediately began shouting that Zinsser was trying to poison the harbour of Havana with typhus. Zinsser's explanations that the rats were dead and being swept out to sea by an ebbtide were not to be heeded by Crane who now began identifying the rats with those that he had observed while in a prison in Paris, and Crane was then completely swept away by his hallucinations. Zinsser records this episode in detail, "He began to recite in his deep, loud voice, as though he were scanning lines from his *Bridge* poem:—

> 'The Doctor has thrown rats into the harbor of Havana.
> The Doctor has thrown typhus rats into the water.
> There will be typhus in Havana.
> The Doctor has thrown rats into the harbor,' and so on.

We tried to pull him away, but he was a powerful person, and while we were struggling we heard steps approaching and saw gold lace on a cap; whereupon both Castaneda and I thought it wise to disappear behind a lifeboat."[5] Before the ship was alarmed, the officers rightly became convinced that Crane was in delirium tremens, and Crane, now overwhelmed by his feelings of persecution, was locked in his cabin for the rest of the night.

In Mexico their friendship continued . . . "I saw a lot of Crane in Mexico City and in a suburb where an American woman writer had given him a room. He used to drop into the Mansera Hotel when I was out and introduce himself to the barkeeper, who had orders to give him what he asked for. I had tried to cut down on Crane's alcohol, but sobriety never lasted, and made him unhappy. The barkeeper always told me with pride: 'Your friend the great poet was here and had three Bacardis.' "[6]

After a year in Mexico, in which his precarious state became more and more obvious, Crane returned aboard the same ship for the United States, and had an

uneventful trip from Vera Cruz to Havana. Horton states that when the boat docked on April 25, 1932 at Havana, "Crane set out alone to make a round of his favorite bars and cafes. Possibly he took luncheon at La Diana, recalling with a pang the dinner table of the year before and the doctor's prophetic remark — 'so might go on to undeserved doom.' "[7] Crane returned that night to the ship and the next morning, three hundred miles from land, slipped into the calm and gentle sea. And "on the trip following, Castaneda, inquiring about where this had occurred, strewed the sea with great handfuls of flowers."[8]

"And so, admitted through black swollen gates
That must arrest all distance otherwise, —
Past whirling pillars and lithe pediments,
Light wrestling there incessantly with light,
Star kissing star through wave on wave unto
Your body rocking!
and where death, if shed,
Presumes no carnage, but this single change, —
Upon the steep floor flung from dawn to dawn
The silken skilled transmemberment of song;

Permit me voyage, love, into your hands . . ."[9]

In Zinsser's remarkable *Rats, Lice and History* we find a brief footnote, in which he records his annoyance with much of the literature of the twenties and thirties, "One could of course multiply examples with 'cummins,' Ezra Pound, and so forth. We distinctly exclude Hart Crane, whom we had occasion to know when we were working on typhus in Mexico. He was a man of great talent, appealing and tragic, for he was very sick in spirit."[10] Hans Zinsser was one of the most remarkable men ever to bless Harvard Medical School with his fantastic knowledge of science and philosophy, for he was a true and great investigator, a historian, musician and poet, a fine fencer and horseman, a great conversationalist and most of all, a great humanitarian. One can only paraphrase Carlyle and say that the only thing more rare than a well-written life is a well-lived one. His autobiography and his biography of typhus are both joyful to read as his intelligent and sensitive spirit roams amidst subject after subject. "In a way, this book is a protest against the American attitude which tends to insist that a specialist should have no interests beyond his chosen field — unless it be golf, fishing, or contract bridge. A specialist — in our national view — should stick to his job like 'a louse to a pig's back.' We risk — because of this performance — being thought less of as a bacteriologist. It is worth the risk. But the day has twenty-four hours; one can work but ten and sleep but eight. We hold that one type of intelligent occupation should, in all but exceptional cases, increase the capacity for comprehension in general; that it is an error to segregate the minds of men into rigid guild classifications; and that art and sciences have much in common and both may profit by mutual appraisal."[11] Zinsser's ideals remain a challenge to all of us, especially those who consider medicine a profession to be entered rather than a trade to be learned. Perhaps Hans Zinsser met no challenge with greater spirit than that of his own approaching death, of which he wrote his last sonnet:—

"Now is death merciful. He calls me hence
Gently, with friendly soothing of my fears
Of ugly age and feeble impotence
And cruel disintegration of slow years.
Nor does he leap upon me unaware
Like some wild beast that hungers for its prey,
But gives me kindly warning to prepare:
Before I go, to kiss your tears away.

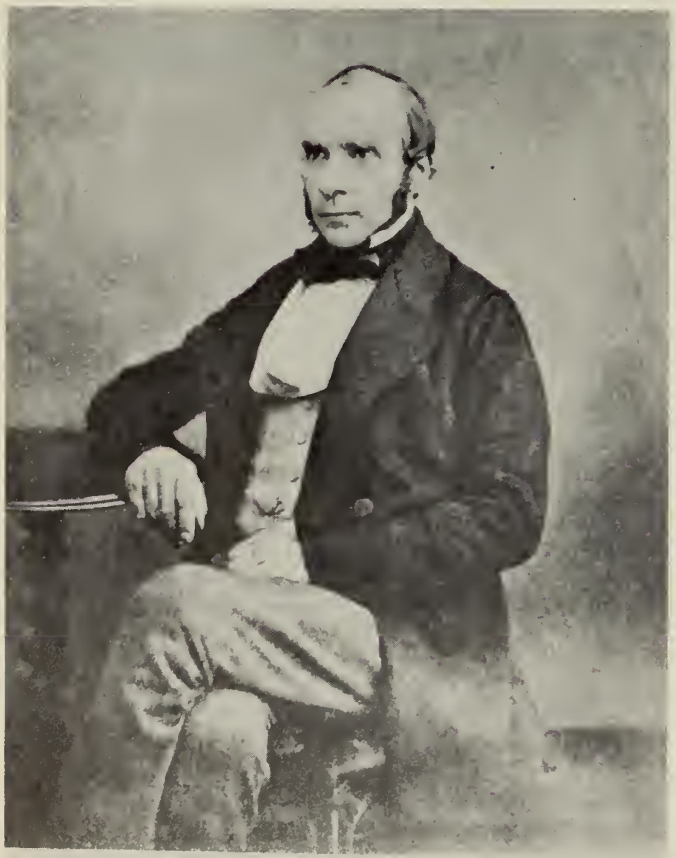
How sweet the summer! And the autumn shone
Late warmth within our hearts as in the sky,
Ripening rich harvests that our love had sown.
How good that 'ere the winter comes, I die!
Then, ageless, in your heart I'll come to rest
Serene and proud, as when you loved me best."[12]

REFERENCES

1. *The Collected Poems of Hart Crane,* Edited with an Introduction by Waldo Frank, Liveright, Inc., New York, 1933, p. 152.
2. Zinsser, Hans, *As I Remember Him: The Biography of R. S.,* Little, Brown and Company, Boston, 1940, p. 334.
3. *Ibid.,* p. 335.
4. Horton, Phillip, *Hart Crane: The Life of an American Poet,* The Viking Press (Compass Books Edition), New York, 1957, p. 280. (Original Edition Published in 1937 by W. W. Norton & Co., Inc.)
5. Zinsser, *op. cit.,* p. 337.
6. Zinsser, *op. cit.,* p. 339.
7. Horton, *op. cit.,* p. 300.
8. Zinsser, *op. cit.,* p. 339.
9. Crane, *op. cit.,* p. 104. (This quotation is part of "Voyages, III" from *White Buildings,* written during or slightly before 1924.)
10. Zinsser, Hans, *Rats, Lice and History,* Little, Brown and Company, Boston, 1935, p. 31.
11. *Ibid.,* viii-ix.
12. Zinsser, Hans, quoted in *As I Remember Him,* p. 441. (Originally published in the *Atlantic Monthly;* later published in *Spring, Summer and Autumn. Poems by Hans Zinsser.* Alfred A. Knopf, 1942.)

I would like to express my thanks to Dr. John Enders for talking of "the Professor" and his work: in the laboratory, with his books and poems: the subtle legacy of Hans Zinsser which this paper has attempted to recapture.

Dr. Snow and the London



John Snow, M.D.

CHOLERA revisited London in midsummer of 1854, after a five-year absence. Each week in July and August brought more cholera deaths than the preceding week. In early September, a few days after a sudden outbreak in which 500 persons perished within ten days around Golden Square, the newly constituted Board of Health issued the following instructions to the populace:

"1. Apply to a medical man immediately in case of looseness of the bowels, as it (sic) may bring on cholera.
2. Do not take salts or other strong medicine without proper advice.
3. Beware of drink, for excess in beer, wine, or spirits is likely to be followed by cholera.
4. Avoid eating meat that is tainted or unwholesome, decayed or unripe fruit, or stale fish or vegetables.
5. Avoid fasting too long. Be moderate at meals.
6. Avoid great fatigue, or getting heated and then chilled.
7. Avoid getting wet or remaining in wet clothes.
8. Keep yourself clean, and your body and feet as dry and as warm as your means and occupation will permit.
9. Keep your rooms well cleaned and limewashed; open the windows as often as possible; remove all dirt and impurities immediately.

Cholera

John Urquhart, '59

View of Broad Street (center of the epidemic), circa 1855.

10. Use chloride of lime or of zinc to remove any offensive smells.
11. If there are any dust or dirt heaps, foul drains, bad smells, or other nuisances in the house or neighbourhood, make complaint without delay. . . ."

This advice summarizes the existing knowledge of the cause and mode of spread of cholera. The Board intimated, however, that these instructions might not completely prevent cholera, and directed *The Times* to report: "A scientific investigation has been directed by the Board into the conditions attendant on the epidemic in the metropolis, to embrace both microscopical, meteorological, chemical, and medical branches of inquiry."

The epidemic was also studied by John Snow, a London physician who earlier had described the four stages of anesthesia. During the previous epidemic, Snow had formulated a hypothesis about the spread of cholera, based upon a consideration of the clinical appearance and course of cholera patients. He supposed that the disease affected primarily only the mucous membrane of the gut, and that the clinical signs and symptoms could be explained by a resulting massive exudation of the liquid portion of the blood into the intestinal lumen. Snow further supposed that there was a specific causative agent — a "cholera poison" — which gained access to the intestinal mucosa from the patient's environment. He reasoned

Reverend Henry Whitehead

that this poison must have reached the intestinal mucosa directly from swallowed food or water, because there was no evidence of prodromal headache or fever to suggest that the poison passed first through the blood, as would have occurred if the poison entered the body with inspired air. Snow's final supposition was that the ultimate source of the cholera poison in the environment was the excretions of cholera patients. He had advanced these thoughts in a small pamphlet five years earlier, but the epidemic of 1854 afforded him two remarkable opportunities to test his hypothesis.

The outbreak of cholera near Golden Square began abruptly in the night of August 31st, and within three days, there were over two hundred deaths. Snow wrote: "As soon as I became acquainted with the situation and the extent of this irruption of cholera, I suspected some contamination of the water of the much-frequented street-pump in Broad Street . . . ; but on examining the water, . . . I found so little impurity in it of an organic nature, that I hesitated to come to a conclusion. Further inquiry, however, showed me that there was no other circumstance or agent common to the circumscribed locality in which this sudden increase of cholera occurred, and not extending beyond it, except the water of the above mentioned pump." The location of the pump is quite obvious from inspection of the figure, where the residence of each fatal case is marked in black. In eight of ten fatal cases living decidedly nearer another pump, Snow was able to document the use of the water from the Broad Street pump shortly before the fatal attack. The crucial experiment for Snow's hypothesis was unwittingly performed by a widow who lived in the West End. "I was informed by this lady's son that she had not been in the neighbourhood of Broad Street for many months. A cart went from Broad Street to West End every day, and it was the custom to take (her) a large bottle of the water from the pump in Broad Street, as she preferred it. The water was taken on Thursday, 31st August, and she drank of it in the evening, and also on Friday. She was seized with cholera on the evening of the latter day, and died on Saturday. A niece, who was on a visit to this lady, also drank of the water; she returned to her residence, in a high and healthy part of Islington, was attacked with cholera, and died also." There was a workhouse on Poland Street, which was more than three-quarters surrounded by houses in which deaths from cholera occurred. Yet, of 535 inmates, only 5 died of cholera. The workhouse had a pump-well on the premises, and the inmates reportedly never sent to Broad Street for water. Snow calculates that if the mortality in the workhouse had been that of the surrounding area, upwards of 100 would have died. There was a brewery on Broad Street, only 180 feet from the pump. The proprietor stated that he employed 70 men, but that none contracted the disease. He added that the men were allowed a certain quantity of malt liquor, and believed that they did not drink water at all.

Snow concluded from this outbreak of cholera: "A very important point in respect to this pump-well is that the water passed with almost everybody as being perfectly pure, and it did in fact contain a less quantity of impurity than the water of some other pumps in the same parish, which had no share in the propagation of cholera. We must conclude . . . that the quantity of morbid matter which is sufficient to produce cholera is inconceivably small."

Snow's conclusion about the pump was independently confirmed by the subsequent researches of a remarkable clergyman in the parish, Rev. Henry Whitehead. After unobtrusively acquiring information from the families of over 400 of the cholera victims in the area during his regular duties, Whitehead reluctantly came to the same conclusion as Snow. Furthermore, his information permitted the calculation of the incidence of the disease among drinkers and non-drinkers of the pump water. His data show that among those who drank from the pump, the ratio of persons attacked to those unaffected was 80:57, while the corresponding ratio among non-drinkers was 20:279.

Whitehead became a great friend and admirer of Snow. He gave his estimate of Snow many years later when he said to a friend: "A portrait of Dr. Snow hangs on my study wall and ever serves to remind me that in any profession the highest order of work is achieved not by fussy demand for 'something to be done,' but by patient study of the eternal laws."

The explanation of this remarkable outbreak of the disease in Broad Street could not account for the dissemination of the disease and its continuation in a city the size of London. Snow wrote: "(Cholera) would be continually liable to die out accidentally in a place, for want of fresh victims, but there is often a way open for (the disease) to extend itself more widely, and to reach the well-to-do classes of the community; I allude to the mixture of the cholera evacuations with the water used for drinking and culinary purposes, . . . by running along channels and sewers into the rivers from which entire towns are sometimes supplied with water."

A CHANCE occurrence permitted Snow to test this hypothesis unequivocally. One of the major water companies supplying water to the south of London, the Lambeth Company, had recently moved its water works from Hungerford Market (a short distance downstream from Parliament House) to Thames Dit-

Map of Broad Street and environs. Black marks indicate the number of fatal cases at each residence. →

ton (about 12 miles upstream), well away from tidal water and the sewage of the city. The Southwark & Vauxhall Company, however, continued to draw water from the Thames at Battersea Bridge, where the water was always polluted. A large area in the south of London was supplied by both companies, who competed with each other. The pipes of both companies ran down each street, and pumped from there into individual houses. The houses were supplied by one or the other water company depending on the whim of the owner some years before, when the pipes had been laid. Snow perceived this magnificent opportunity to test his hypothesis: "The experiment was on the grandest scale. No fewer than three hundred thousand people, of every age and occupation, and of every rank and station, from gentlefolks down to the very poor, were divided into two groups without their knowledge: one group being supplied with water containing the sewage of London, and amongst it, whatever might have come from cholera patients; the other group having water quite free from such impurity."

In July, 1854, he began his inquiry in two subdistricts, and found that, of the 44 deaths occurring up to August 12, 38 lived in houses supplied by the polluted Southwark & Vauxhall; four were supplied by Lambeth, and 2 had pump-wells only. With these data, Snow convinced the Registrar General, William Farr, to report the water supply of each house where a fatal case of cholera had occurred, and to note in the weekly health reports the water supply to each district. Snow continued his door-to-door investigations, and found that, for seven weeks, there were 344 deaths from cholera in the area studied. These were apportioned: Southwark & Vauxhall 286, Lambeth 14, Thames water directly 22, pumps 8, unknown

4. The Registrar General's data in five of the districts supplied almost equally by the two water companies is shown in Table one. These data show a four to eightfold greater incidence of cholera among the customers of Southwark & Vauxhall than among customers of Lambeth. The data for the entire city are given in Table two, and it can be seen that, although only about 10% of the population were supplied by the polluted Southwark & Vauxhall, they accounted for about 40% of the cholera cases in the city. The Lambeth customers enjoyed a relative immunity from the disease, for although they constituted roughly 7% of the population, they accounted for only 4% of the cholera cases.

It was necessary to account for the peculiar concentration of the cholera poison in the water of the Thames at this time which these data imply. Snow wrote: "In hot, dry weather, . . . the river becomes a kind of prolonged lake, the same water passing twice a day to and fro through London with the tides, and receiving the excrement of its two millions and more of inhabitants, which keeps accumulating until there is a fall of rain. In time of cholera, the evacuations of the patients keep accumulating in the river along with the other impurities; and it is probably in this way that the dry weather with a high barometer aids in promoting cholera, as it has often been observed to do." He added, in answer to the question why everyone who drank the water did not get cholera: "It cannot be supposed that a morbid poison, which has the property of reproducing its kind under suitable circumstances, should be capable of being diluted indefinitely in water, like a chemical salt; and therefore it is not to be presumed that the cholera poison would be equally diffused through every particle of water. The eggs of the tapeworm must undoubtedly pass down the sewers into the Thames, but it by no means follows that everybody who drinks a glass of the water should swallow one of the eggs."

WHEN the first weekly cholera report which cited district water supplies appeared in *The Times,* the Registrar General noted the relative absence of cholera in the districts which were supplied only by Lambeth Company, and called attention to the fact that Lambeth had recently moved their waterworks upstream. He noted: "On the water companies that supply the population with the dirty water of the rivers a serious responsibility rests." Within the month, however, a very long and complicated letter appeared in *The Times,* signed by someone calling himself only "A Civil Engineer and Architect." The

Table 1

COMPARISON OF TWO WATER COMPANIES

	NO. HOUSES SERVED		EST. POP. SERVED		FATAL CASES REPORTED		MORTALITY PER 10,000	
	S&V	LAM	S&V	LAM	S&V	LAM	S&V	LAM
St. Saviour	2631	1689	19617	14201	406	72	207	50
St. George	3419	3183	25039	23712	388	99	155	41
Newington	5224	5473	31940	33531	458	58	143	17
Lambeth	8077	11763	54982	83786	525	138	96	16
Camberwell	4005	1835	23472	10478	352	33	150	31

S&V = **Southwark & Vauxhall Water Company**
LAM = **Lambeth Water Company**

CHOLERA MORTALITY IN LONDON

	POPULATION IN 1851	CHOLERA DEATHS IN 14 WEEKS	DEATHS PER 10,000 POPULATION
LONDON	2362236	10367	43
EST. POPULATION SUPPLIED BY SOUTHWARK & VAUXHALL	266516	4093	153
EST. POPULATION SUPPLIED BY LAMBETH	173748	461	26

Table 2

writer disclaimed any connection with the water companies, and characterized himself only as a seeker after the truth. He wrote: "There are so many causes at work towards the same end, and these causes are so numerous, so enshrouded in mystery at present, that it is unphilosophical in the highest degree to dwell exclusively on any one of them . . . (and is) a gross act of injustice (to the water companies)." In a subsequent letter, this writer claimed that the Registrar General had based his notions on *unfiltered* water. He wrote: "Sir, I equally object to, and I protest against, the careless, slipshod mode of argumentation adopted by a branch of the civil service, which, of all others, should be the most severely logical in such cases. . . . Indeed, the report is so worded that any ordinary reader would infer that the Southwark & Vauxhall (which does filter their water) supplied unfiltered water. Is this either fair or logical?" These letters were subsequently published in pamphlet form, and their writer was later revealed to be the Secretary to an institution known as the "Private Enterprise Association."

Snow's work received polite attention, but his conclusions were accepted neither by his reviewers nor by the profession. Fortunately, however, improvements were gradually made in those of London's water supplies that were frankly polluted; indeed the Southwark & Vauxhall Company had been planning the transfer of their waterworks upstream prior to Snow's study. These changes continued to be prompted by the feeling that polluted water was "unhealthy" and for esthetic reasons, until Koch demonstrated the role of the comma bacillus about 30 years later.

Snow commented sharply on his contemporaries' efforts to find another explanation for the prevalence of cholera, and described a series of events that has been repeated often in subsequent investigations: "When Professor Schonheim lately . . . discovered a new gaseous substance in the air, which he named ozone, it was straightaway supposed that this was the cause of cholera. After a little time, as . . . ozone was found to be pretty generally present, cholera . . . was attributed to its absence. Of course, either the presence or absence of ozone, along with a presumed predisposition, would afford a perfectly satisfactory explanation of cholera, . . . to all those who do not require any proof."

Snow considered that he had demonstrated the principal mode of communication of cholera, and so labelled his monograph. The high incidence of cholera among Southwark and Vauxhall customers in the areas where the two companies supplied adjacent houses cannot be dismissed out of hand as "only a statistical association," like an association between the barometer reading and cholera or between cellophane production and lung cancer. Snow perceived that a large heterogeneous population had by chance been randomly divided into two groups — one of which drank the sewage of the Thames, the other of which drank water free of sewage. Thus, he was able to gather data from what in fact was a controlled experiment.

Snow's study illustrates the remarkable precision with which the etiology of a mysterious disease may be inferred from epidemiological data, and demonstrates as well that rational and effective preventive measures may be instituted on the basis of such data in advance of specific knowledge of disease causation.

PLEASE

Each year, a hard-working committee chooses a group of candidates for Councilors for the next three years. The Committee feels these choices are excellent and deserve your careful consideration.

ALEXANDER H. BILL, JR. '39

A.B. (Harvard) 1935 — Seattle, Wash.

1942-46 A.U.S. (M.C.). 1946-48 Boston Children's Hospital and Assistant in Surgery, Harvard Medical School. 1948-date Clinical Associate in Surgery, University of Washington School of Medicine. 1954-56 Trustee, Kings County Medical Society. 1954-date Board of Trustees, Washington State Heart Association. 1954 Chairman, Research Allocations Committee. 1957-59 Executive Committee, Health and Welfare Council (1958-59 Vice Chairman.)

RUSTIN McINTOSH '18

A.B. (Harvard) 1914 — New York

1931-date Carpentier Professor of Pediatrics, Columbia University. 1931-date Director of Pediatric Service, Babies Hospital, Presbyterian Hospital, New York. 1934 President, Society for Pediatric Research. 1953-54 President, American Pediatric Society. 1954-date Corresponding member, British Pediatric Association.

PAUL AUSTIN CHANDLER '24

S.B. (Hastings) 1920 — Boston

1927-date Department of Ophthalmology, Harvard Medical School, 1935-57 Surgeon, Massachusetts Eye and Ear Infirmary (now Consulting Surgeon). 1952-60 American Board of Ophthalmology. 1953-date Associate Clinical Professor of Ophthalmology, H.M.S. S.D. (hon.) Hastings 1948.

VOTE

If you have not already voted, won't you dig around on your desk and find the ballot which was mailed to you three weeks ago. Give *three* of these men your "X".

The deadline is May 22. *Please vote.*

FRANK BRYANT CUTTS '32

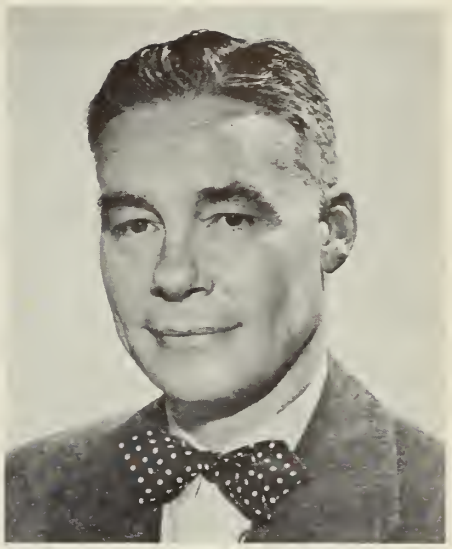
A.B. (Harvard) 1928—Providence, R. I.

1942-45 Lt. Colonel, A.U.S. (M.C.). Director, Heart Station and Visiting Physician, Rhode Island Hospital. 1955-56 President, Rhode Island Medical Society. 1958-date President, Staff Association, Rhode Island Hospital.

BENJAMIN TENNEY, JR. '25

A.B. (Dartmouth) 1921 — Boston

1934-41 Assistant in Department of Obstetrics and Gynecology, Harvard Medical School. 1941-47 U.S. Navy Rear Admiral (R.). 1947-56 Professor of Obstetrics and Gynecology, Boston University. 1956-date Clinical Professor of Obstetrics, Harvard Medical School. Director of Obstetrics and Gynecology, Boston City Hospital.



HENRY NICKERSON PRATT '30

A.B. (Harvard) 1924 — New York

1931-34 House Staff, Boston Children's Hospital. 1934-41 Instructor in Pediatrics, Harvard Medical School. 1942-45 Colonel A.U.S. (M.C.). 1946-48 Administrator, Memorial Hospital, New York City. 1948-52 President, Hospital Bureau of Standards and Supplies. 1948-date Director, New York Hospital. 1952-53 President, Greater New York Hospital Association. 1956-57 Vice Chairman, Joint Commission on Improvement of the Care of the Patient in New York State.

INTERNSHIPS, CLASS OF 1959

Photographs by David Lawlor

Unless otherwise noted all internships start July 1, 1959 for one year.

Name	*Hospital (and location)*	*Service*
Aarostad, Norman O.	Univ. of Oregon Med. Sch., Portland, Oregon	Rotating
Abroms, Gene M.	Grace-New Haven Community, New Haven, Conn.	Surgery
Adelstein, Robert S.	Bellevue (3rd Div.-New York U.), New York, N. Y.	Medicine
Amarasingham, Chandra R.	Bellevue (1st Div.-Columbia U.), New York, N. Y.	Mixed
Angelakos, Evangelos T.	Boston University, Boston	Physiology
Ault, Lynn L.	Johns Hopkins, Baltimore, Maryland	Surgery
Austin, Raymond F., Jr.	U. of Oregon Med. Sch., Portland, Oregon	Rotating
Baker, Frederick S., Jr.	Roosevelt, New York, New York	Mixed
Barrett, James E., Jr.	Mary Hitchcock Memorial, Hanover, N. H.	Rotating
Barten, Harvey H.	Beth Israel, Boston	Medicine
Beck, Kathryn S.	Boston City (Boston U. Service), Boston	Pediatrics
Beiles, Carl M.	New York, New York, New York	Surgery
Berard, Costan W.	Strong Memorial, Rochester, New York	Surgery
Berger, Jacob E.	Beth Israel, Boston	Medicine
Berlin, Richard D.	Johns Hopkins, Baltimore, Maryland	Medicine
Blacklow, Robert S.	Peter Bent Brigham, Boston	Medicine
Bloom, Henry S.	Bronx Municipal Hosp. Cntr., New York, N. Y.	Medicine
Boden, Richard E.	New York, New York, New York	Surgery
Bostic, William C., 3d	Roosevelt, New York, New York	Mixed
Brown, Forst E.	University Hospitals, Cleveland, Ohio	Surgery
Burden, Charles E.	Children's Medical Center, Boston	Pediatrics
Burkhardt, Boyd R.	Peter Bent Brigham, Boston	Surgery
Cage, Gary W.	North Carolina Memorial, Chapel Hill, N. C.	Medicine
Carey, Robert W.	Massachusetts General, Boston	Medicine
Carey, Thomas A.	New England Center, Boston	Medicine
Carter, Harry W.	Johns Hopkins, Baltimore, Maryland	Pathology
Chang, Frederic C., Jr.	Salt Lake County General, Salt Lake City, Utah	Rotating
Chirman, Savelly B.	Univ. of Oklahoma, Okla. City, Oklahoma	Rotating
Clemens, Norman A.	University Hospitals, Cleveland, Ohio	Medicine
Colberg, James E.	Presbyterian, New York, New York	Surgery
Conway, Richard E.	Boston City (Harvard Service), Boston	Surgery
Cooper, Alan J.	University Hospitals, Cleveland, Ohio	Medicine
Cumberbatch, Rudolph St. C.	Montreal General, Montreal, Canada	Rotating
Darrell, Richard W.	Boston City (Harvard Service), Boston	Medicine
De la Cruz, Oscar A.	Boston City (Harvard Service), Boston	Surgery
Dillon, Donald E.	Walter Reed, Washington, D. C.	Rotating
Dixon, J. Kelly	North Carolina Memorial, Chapel Hill, N. C.	Mixed
Dowling, John A.	University Hospitals, Cleveland, Ohio	Surgery
Downes, Hall	Tripler, Moanalua Gardens, Honolulu	Rotating
Engelman, Karl	Massachusetts General, Boston	Medicine
Epstein, Charles J.	Peter Bent Brigham, Boston	Medicine
Epstein, Lois B.	Peter Bent Brigham, Boston	Pathology
Esselstyn, Sarah V.	Duke, Durham, North Carolina	Pediatrics
Eyring, Edward J.	Roosevelt, New York, New York	Mixed
Fern, Donald J.	Bellevue (2nd Div.-Cornell U.), New York, N. Y.	Medicine
Finkel, Gerald C.	Bronx Municipal Hosp. Cntr., New York, N. Y.	Medicine
Flacke, Joan W.	Boston City (Boston U. Service), Boston	Pediatrics
Flagg, Richard S.	Mary Hitchcock Memorial, Hanover, N. H.	Rotating
Friedman, Alan J.	Lenox Hill, New York, N. Y.	Rotating
Friedman, Paul	Baltimore City, Baltimore, Maryland	Surgery
Galler, Floyd B.	Univ. of Minnesota, Minneapolis, Minn.	Surgery
Galt, John	Cincinnati General, Cincinnati, Ohio	Rotating
Gilsdorf, Walter T.	State Univ. of Iowa, Iowa City, Iowa	Rotating
Glaser, Fred B.	Strong Memorial, Rochester, New York	Rotating

Name	*Hospital (and location)*	*Service*
Gold, Warren M.	Beth Israel, Boston	Medicine
Goldstone, Robert A.	St. Vincent's, New York, N. Y.	Surgery
Gonnella, Joseph S.	Univ. of Ill. Res. & Educ., Chicago, Ill.	Rotating
Goss, Donald A.	Vanderbilt Univ., Nashville, Tennessee	Surgery
Green, Howard H.	Mary Hitchcock Memorial, Hanover, N. H.	Rotating
Hansen, Wilhelm G., 3d	University Hospital, Ann Arbor, Michigan	Rotating
Hardison, William G. M.	Boston City (Harvard Service), Boston	Medicine
Hayes, Robert E.	Boston City (Harvard Service), Boston	Medicine
Haywood, Anne M.	Univ. of California, San Francisco, Calif.	Pediatrics
Herbst, Arthur L.	Massachusetts General, Boston	Surgery
Herrmann, Kenneth L.	Strong Memorial, Rochester, New York	Rotating
Hobson, J. Allan	Bellevue (3rd Div.-New York U.), New York, N. Y.	Medicine
Howard, Jed L.	Univ. of Oregon Med. Sch., Portland, Oregon	Rotating
Jeanes, Lincoln D., Jr.	Jefferson Davis, Houston, Texas	Surgery
Jeanrenaud, Arlette	Internship Postponed	
Kieger, Arthur B.	University Hospitals, Columbus, Ohio	Surgery
Klein, David E.	Denver General, Denver, Colorado	Rotating
Kopald, Hugh H.	University Hospitals, Cleveland, Ohio	Medicine
Korn, David	Massachusetts General, Boston	Pathology
Kris, Anton O.	Bronx Municipal Hosp. Cntr., New York, N. Y.	Medicine
Kuhns, Thomas R.	Bellevue (2nd Div.-Cornell U.), New York, N. Y.	Medicine
Lamb, Thomas W.	Univ. of Virginia, Charlottesville, Va.	Surgery
Lampert, Nelson R.	Massachusetts General, Boston	Surgery
Leape, Lucian L.	Massachusetts General, Boston	Surgery
Leeman, Cavin P.	Massachusetts General, Boston	Medicine
Lees, Robert S.	Massachusetts General, Boston	Surgery
Lessow, Herbert	Univ. of Ill. Res. & Educ., Chicago, Ill.	Rotating
Levey, Raphael H.	Massachusetts General, Boston	Surgery
Li, Ting-Kai	Peter Bent Brigham, Boston	Medicine
Lindem, Martin C., Jr.	Peter Bent Brigham, Boston	Surgery
Lindenbaum, John	Presbyterian, New York, New York	Medicine
Litwin, Sonny B.	Cincinnati General, Cincinnati, Ohio	Rotating
Livant, Judith H.	Mount Sinai, New York, New York	Rotating
Mahan, John H.	Boston City (Harvard Service), Boston	Surgery
Maltsberger, John T., 3d	Pennsylvania, Philadelphia, Pennsylvania	Rotating
Marinkovich, Vincent A.	Johns Hopkins, Baltimore, Maryland	Pediatrics
Marks, Ira	North Carolina Memorial, Chapel Hill, N. C.	Medicine
McCully, Kilmer S.	Massachusetts General, Boston	Medicine
McEwen, Charles M., Jr.	Beth Israel, Boston	Medicine
McPeek, Jack B.	Boston City (Harvard Service), Boston	Surgery
Merrifield, John F.	Univ. of Ill. Res. & Educ., Chicago, Ill.	Rotating
Messinger, Eli C.	Grace-New Haven Community, New Haven, Conn.	Medicine
Michelson, Ann M.	Buffalo General, Buffalo, New York	Medicine
Moore, Daniel H., Jr.	University Hospital, Ann Arbor, Michigan	Rotating
Moseley, Roger V.	Peter Bent Brigham, Boston	Surgery
Mundth, Eldred D.	Massachusetts General, Boston	Surgery
Papanek, George O.	Univ. of Ill. Res. & Educ., Chicago, Ill.	Rotating
Persky, Alan D.	Univ. of California, Los Angeles, Calif.	Medicine
Pittman, Joseph G.	Peter Bent Brigham, Boston	Medicine
Poutas, John D.	Univ. of California, San Francisco, Calif.	Rotating
Prichard, James W.	Bellevue (3rd Div.-New York U.), New York, N. Y.	Medicine
Rapoport, Stanley I.	Bellevue (2nd Div.-Cornell U.), New York, N. Y.	Medicine
Raskin, Neil H.	Bellevue (1st Div.-Columbia U.), New York, N. Y.	Mixed
Raymond, George D.	North Carolina Memorial, Chapel Hill, N. C.	Medicine
Reed, William P.	George Washington U., Washington, D. C.	Rotating
Reuter, Seymour H.	Boston City (Harvard Service), Boston	Surgery
Rivlin, Richard S.	Bellevue (3rd Div.-New York U.), New York, N. Y.	Medicine
Roach, John J.	University Hospitals, Columbus, Ohio	Surgery
Robbins, Norman	Bellevue (2nd Div.-Cornell U.), New York, N. Y.	Medicine
Rodgers, John B., Jr.	Boston City (Harvard Service), Boston	Medicine
Rosenberg, Irwin H.	Massachusetts General, Boston	Medicine
Rosenthal, Jerome	Bellevue (3rd Div.-New York U.), New York, N. Y.	Medicine
Rowe, Kenneth W., Jr.	Cincinnati General, Cincinnati, Ohio	Rotating
Ruel, Richard E.	Grace, Detroit, Michigan	Rotating
Rush, David	Univ. of Ill. Res. & Educ., Chicago, Ill.	Rotating
Ryan, James W.	Peter Bent Brigham, Boston	Medicine
Ryan, Kevin G.	Massachusetts General, Boston	Medicine

Happy Hour

"Wherefore art thou . . ."

"Guess what! . . ."

h Bottle Babies

The Doctors Warren are pleased . . .

"Cream — Sugar — Lemon . . . Whiskey?"

Name	*Hospital (and location)*	*Service*
Sanderson, Richard G.	Univ. of Oregon Med. Sch., Portland, Oregon	Rotating
Sapir, Paul E.	Johns Hopkins, Baltimore, Maryland	Pediatrics
Schildkraut, Joseph J.	Univ. of California, San Francisco, Calif.	Medicine
Schneider, Peter B.	Bellevue (2nd Div.-Cornell U.), New York, N. Y.	Medicine
Schoenbrun, Richard L.	Univ. of California, Los Angeles, Calif.	Anatomy
Shepherd, Gordon M.	Oxford University, Oxford, England	Physiology
Sidd, James J.	Boston City (Harvard Service), Boston	Medicine
Soltys, John J., Jr.	Michael Reese, Chicago, Illinois	Rotating
Spaeth, George L.	University Hospital, Ann Arbor, Michigan	Rotating
Spangler, Robert A.	University of Buffalo, Buffalo, New York	Biophysics
Spencer, Roger F.	North Carolina Memorial, Chapel Hill, N. C.	Mixed
Spievack, Alan R.	Boston City (Harvard Service), Boston	Surgery
Steinhauer, Bruce W.	Boston City (Harvard Service), Boston	Medicine
Suritis, Zigurds L.	Syracuse Medical Center, Syracuse, N. Y.	Surgery
Taube, Irvin	Roosevelt, New York, New York	Mixed
Taylor, Leland G.	Univ. of California, San Francisco, Calif.	Pathology
Teal, Peter V.	Denver General, Denver, Colorado	Rotating
Thron, Christopher D.	George F. Geisinger Memorial, Danville, Pa.	Rotating
Urquhart, John	Massachusetts General, Boston	Surgery
Vaillant, George E.	Boston City (Boston Univ. Service), Boston	Medicine
Vesell, Elliot S.	Massachusetts General, Boston	Pediatrics
Weglarz, Stanley S.	Mary Hitchcock Memorial, Hanover, N. H.	Rotating
Wegner, Karl H.	Massachusetts General, Boston	Pathology
Welland, Frederick H.	Peter Bent Brigham, Boston	Medicine
Williams, Harold W., Jr.	Roosevelt, New York, New York	Mixed
Wohl, Richard H.	Massachusetts General, Boston	Surgery
Zollinger, Robert M.	Peter Bent Brigham, Boston	Surgery
Zwilling, William F.	University Hospitals, Cleveland, Ohio	Surgery

1721: ***Victory over smallpox*** — Dr. Zabdiel Boylston of Boston defied fierce opposition to give the first vaccination to his son.

1846: ***A new era in surgery*** — ether first demonstrated at Massachusetts General Hospital by Drs. Warren and Morton.

1927: ***Life-saving iron lung,*** invented by Professor Phillip Drinker, first used at Boston's Children's Hospital.

From medical mysteries...

to medical miracles

NEW ENGLAND'S MEDICAL SKILLS GIVE NEW HOPE TO ALL MANKIND

For 175 years *The* FIRST has watched New England's medical men play a major role in guiding mankind from an age of mystery and superstition into an enlightened era of wonder drugs, miracle surgery, and atomic medicine. No list of their many achievements can do justice to their skill. *The* FIRST counts it an honor to have known these New England physicians — a privilege to have helped many of them, and the institutions they serve, with their financial problems. Here, indeed, is another proud chapter in the New England Story — dedicated men and women building a citadel of medicine for all the world.

The
FIRST
NATIONAL BANK
of
BOSTON
1784 • 1959

Member of the Federal Deposit Insurance Corporation

Personal and Corporate Trust Service through our affiliate OLD COLONY TRUST COMPANY

BOOK REVIEW

MOORE, MERRILL: The Dance of Death in the Twentieth Century, Illustrations by Hans Holbein, I. E. Rubin, 1000 Linden Blvd., Brooklyn 12, N. Y., 1958. 95 pp.

This volume is rather apt. During the Middle Ages, the Dance of Death was a very popular topic, and Holbein's famous woodcuts were by no means the first interpretation (they were published in 1538). Pride was the cardinal sin. All walks of life from Pope and Emperor down to mendicant friar are tugged by playful skeletons bearing the grim message that pride is vanity and that death awaits. A deep note of life's transiency pervades Dr. Moore's poetry, too, and makes him a good choice to illustrate these superb woodcuts (the book would be worth buying for the woodcuts alone). But Moore's people are both sadder and more humorous. They do not sin through pride; indeed, the word "sin" itself has little meaning. It is right, then, that he doesn't really bother about the woodcuts; he chooses as subjects, instead, the night switchboard operator who committed suicide; the late, gay blade whose spirit "lashed his tired body so"; the "Unknown White Man in the City Morgue"; or just a good friend dying suddenly. Not pride, but a gentle, humorous, anecdotal conviction of life's transiency — this is Dr. Moore's Twentieth Century Dance of Death.

The purist and poetaster will be annoyed

Holbein

The Abbess

with Merrill Moore's sonnets. They are prosy, the rhyming is willful or careless; usually they are not quite pointed enough for satire, not thoughtful or subtle enough for serious verse; and perhaps the main objection would be Dr. Moore's general lack of concern for the niceties of poetic expression.

He could certainly have acquired prowess in these ABC's, had he wanted, for he was intimately connected with the "Fugitive" school of young poets at Vanderbilt during the early 1920's — a group which produced such eminent American poets as Allan Tate and John Crowe Ransome. Furthermore, Robert Frost told us last February that Dr. Moore could on occasion become absolutely intoxicated with language and recite long passages by heart. Innate lack of ability or appreciation can hardly have been the reason. He must have had a purpose.

His poems are bits and snatches from everyday life, with no great attempt at philosophical comment. If we do perceive an underlying philosophy, it is a sort of common-denominator, sing-song sadness. This may be the lot of the psychiatrist, since the result is bound to be a bit grey, when the psyche is probed en masse. But there is a feeling of kindness, too, a democratic, dogged compassion which answers the sadness, as if it were meant to encompass mankind in a great bear hug of words.

It is refreshing to pick up this book. Dr. Moore had a real ability to sum up a whole life in a short, humorous anecdote. His sentences are simple, his imagery intelligible: it is a pleasure.

G.M.D.

ALUMNI NOTES

1896

Col. Joseph Francis Hawkins reports that he is 86 years old "and still going strong." He visits the office every day although he no longer operates. He challenges those who can match his record to let him know.

1898

A testimonial dinner honored **Joseph W. Proctor** on January 30 in Boston for his donation of valuable research information on leprosy collected during the past four decades. Dr. Proctor presented his research material on Hansen's disease and leprosy to Tufts Medical School, including hundreds of slides taken in the various stages of the disease and treatment. His interest in this field developed during his administration of the Massachusetts leper colony on Penikese Island off Cape Cod many years ago. After the transfer of the colony south he kept in close touch with the Carvel Colony in Louisiana and made his most recent visit there in 1958. Members of both Tufts and Harvard Medical Schools gathered to honor Proctor.

1900

The wife of the late **Walter B. Cannon** was recently cited in the Harvard *Crimson* for her many connections and contributions to the Harvard community in the past 82 years. She is the daughter of a Harvard Alumnus, a Radcliffe undergraduate, wife of a Medical School Professor, mother of five talented children (three daughters graduated from Radcliffe, one son from Harvard and Medical School), mother-in-law of Professors Arthur M. Schlesinger, Jr., and John Kenneth Fairbank, grandmother of two Harvard freshmen, great-grandmother-to-be of a potential Harvard or Radcliffe student. Dr. and Mrs. Cannon traveled all over the world during his lifetime. She is the author of several best-selling books, including *Red Rust,* and *Heirs.* An avowed liberal, she has supported the Birth Control Movement, public schools and the N.A.A.C.P. She has also faithfully backed her alma mater, which presented her a citation on its seventy-fifth anniversary. Modestly she describes herself as "a very ordinary person with a very privileged life."

1902

A book entitled *A Biographical Sketch of Stephen Collins Foster* was dedicated to **Fletcher Hodges** and his wife, Rebecca. The book was written by their son, Fletcher Hodges, Jr.

1903

Ralph E. Lee is retired and living in Douglastown, Long Island, New York.

1904

Harry M. Page retired in December, 1958, having practiced in Oregon since the date of the State's license, January 10, 1907.

1908

Albert S. Tenney continues to practice dermatology with offices at East Orange and Dover, New Jersey. He is also compiling data for a book on fifty years of practice in China and the U. S. A., "for which (he) trusts that (he) may be able to find a publisher."

1909

Loring T. Swaim is retired and living a busy, happy life in the country. He has sold his farm in Pepperell and has moved to Groton, Mass., "where life is simpler."

1912

Don J. Knowlton is happily living a "pretty much out-door life" in Cotuit, Massachusetts.

Word from **A. William Reggio:** "Same 'odd jobs'; same wife (God bless her!)